KLEINZELLER, A; KNOTKOVA, A.

Electrolyte transport in rat diaphragm. Physiol. Bohemoslov. 13 no.4:317-326 '64.

1. Laboratory for Cell Metabolism, Institute of Microbiology, Czechoslovak Academy of Sciences, Prague.

L 23997-66 EWT(1)/EWA(h)
ACC NR: AP6009838 SOURCE CODE: UR/0413/66/000/004/0031/0031

AUTHOR: Borovkov, V. S.; Knots, L. L.; Lukovtsev, P. D.; Sokolov, L. A.

ORG: none

66 B

TITLE: An ELF pulse generator. Class 21, No. 178818 [announced by Institute of Electrochemistry, AN SSSR (Institut elektrokhimii AN SSSR)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 4, 1966, 31

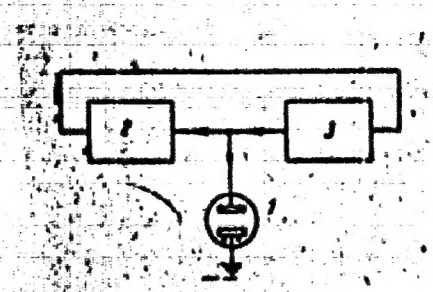
TOPIC TAGS: ELF, pulse generator, positive feedback, current stabilization, semiconductor device

ABSTRACT: This Author's Certificate introduces: 1. An ELF pulse generator based on semiconductor devices. The unit contains a switching circuit, a reversible current stabilizer and a positive feedback circuit. In order to reduce the frequency and increase the stability of the generated pulses, an electrochemical time-delay element is connected in the positive feedback circuit at the output of the reversible current stabilizer. The voltage from this element is fed to the switching circuit. 2. A modification of this generator in which various periods of oscillations may be produced by connecting several electrochemical elements with various time delays in the feedback circuit.

UDC: 621.373.52

Card 1/2

L 23997-66
ACC NR: AP6009830



1--electrochemical time-delay element; 2--electronic switching circuit; 3--reversible current stabilizer

SUB CODE: 09/ SUBM DATE: 05Apr65/ ORIG REF: 000/ OTH REF: 000

Card 2/2

ALEKSEYEV, V.N.; KNOTS, L.L.; TARASEVICH, M.R.; SHUMILOVA, N.A. (Moscow)

Apparatus for investigating electrochemical systems by the triangular pulse method. Zhur. fiz. khim. 38 no.4:1048-1051 Ap '64. (MIRA 17:6)

1. Akademiya nauk SSSR, Institut elektrokhimii.

ALEKSEYEV, V.N.; ZHUTAYEVA, G.V.; KNOTS, L.L.; LENTSNER, B.I.; TARASEVICH, M.R.; SHUMILOVA, N.A.

Method of trapezoidal voltage pulses. Elektrokhimiia 1 no.3:373-376 Mr '65. (MIRA 18:12)

1. Institut elektrokhimii AN SSSR.

KNOTS, L.L.; DUBOVIK, O.O.

Technique of generating self-oscillations in a cell for measuring the Volta potential difference by the condenser method. Elektrokhimiia 1 no.7:788-793 Jl '65.
(MIRA 18:10)

1. Institut elektrokhimii AN SSSR.

LEYKIS, D.I.; SEVAST'YANOV, E.S.; KNOTS, L.L.

Change in the impedance components of an electrode with change of alternating current frequency. Zhur. fiz. khim. 38 no.7:1833-1837 Jl '64. (MIRA 18:3)

1. Institut elektrokhimii AN SSSR.

L 7972-66 EWT(m)/EPF(c)/ETC/EWG(m)/EWP(j)/T/EWP(t)/ETP(b) IJP(c) DS/JD/JG/RM
ACC NR: AP5025083 SOURCE CODE: UR/0364/65/001/010/1268/1272

AUTHOR: Burshteyn, R. Kh.; Pshenichnikov, A. G.; Tyurin, V. S.; Knots, L. L.

ORG: Electrochemical Institute AN SSSR (Institut elektrokhimii AN SSSR)

TITLE: Chemisorption and oxidation of hydrocartons on a platinum electrode I. Ethane

SOURCE: Elektrokhimiya, v. 1, no. 10, 1965, 1268-1272

TOPIC TAGS: hydrocarbon, chemisorption, oxidation, electrode, platinum, electrolytic cell

ABSTRACT: It has been demonstrated that the chemisorption of organic substances on platinized platinum is accompanied by processes of dehydrogenation, and hydrogenation and by breaking of the C-C and C=C bonds. It follows from galvanostatic charge curves that, in the chemisorption of ethylene and ethane on a platinum surface, the amount of chemisorbed hydrogen and organic groups depends on the experimental conditions. The present article examines the process of the chemisorption and oxidation of ethane on a platinum electrode, using the method of tri-

Card 1/2 UDC: 541.13

L 7972-66
ACC NR: AP5025083

angular pulse voltages with a scanning speed of 5 mv/sec. The i-φ curves were recorded with a two-coordinate automatic recording instrument, Type PDS-021. The experiments were carried out in 1 N H_2SO_4 at 90 C. The electrode, at a given potential (φ), was brought into contact with a solution saturated with ethane. The residence time in the solution saturated with ethane, at a potential equal to 1.1 volts, was calculated from the moment when the electrode attained a potential of 0.6 volts. Then the hydrocarbon was eliminated from the solution by passing argon through it for a determined period of time. The i-φ curves were constructed by taking different intervals of time for the residence of the ethane in the chemisorbed state. The experimental results are exhibited graphically and in tabular form. Orig. art. has: 7 formulas, 5 figures and 1 table

SUB CODE: GC/ SUBM DATE: 30 May65/ ORIG. REF: 003/ OTH REF: 003

GC
Card 2/2

L 8167-66 EEC(k)/EPF(n)-2/EWA(h)/EWT(l) AT/WW

ACC NR: AP5025686 SOURCE CODE: UR/0286/65/000/018/0036/0037

44,55 44,55 44,55

AUTHORS: Knots, L. L.; Lentener, B. I.; Alekseyev, V. N.

51
B

ORG: none

TITLE: Single trapezoidal pulse generator, Class 21, No. 174664 [announced by Institute of Electrochemistry, AN SSSR (Institut elektrokhimii AN SSSR)]

44,55

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 36-37

21,44,55

TOPIC TAGS: pulse generator, pulse shaper

ABSTRACT: This Author Certificate presents a single trapezoidal pulse generator containing a device with two stable states with independent regulation of the positive and negative levels of the output voltage, a nonlinear integrator with independent regulation of the integration limits, a differentiating amplifier, a passive RC circuit, and a time delay unit (see Fig. 1). To insure the mutually independent regulation of the trapezoidal pulse parameters, the integrator is connected in series with the device with two stable states. The differentiating amplifier, the passive RC circuit, a trigger, and the regulated time delay unit, which are all connected in series, are connected between the integrator output and

Card 1/2 UDC: 621.373.43

2

L 8167-66

ACC NR: AP5025686

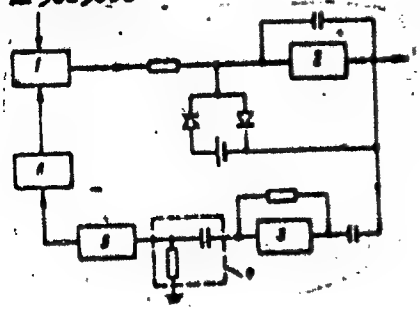


Fig. 1. 1- device with two stable states; 2- nonlinear integrator; 3- differentiating amplifier; 4- passive RC circuit; 5- trigger; 6- regulated time delay unit

the bistable device input. Orig. art. has: 1 diagram.

SUB CODE: EC/ SUBM DATE: 07Mar63

jw

Card 2/2

KNOTS, L.L.; DUDOVIK, O.G.

Measurement of the contact difference of potentials by the condenser-type method. Elektrokhimiia 1 no.5:507-511 My '65. (MIRA 18:6)

1. Institut elektrokhimii AN SSSR.

S/076/60/034/008/035/039/XX
B015/B063

AUTHORS: Leykis, D. I., Knots, L. L.

TITLE: Detection of Concentration Polarization by Measuring the Electrode Impedance

PERIODICAL: Zhurnal fizicheskoy khimii, 1960, Vol. 34, No. 8, pp. 1872-1874

TEXT: For kinetic studies of electrodic processes it is important to know whether a concentration polarization takes place at the electrode. This problem is usually solved by measuring the component of the electrode impedance in alternating current at different frequencies, since the concentration polarization at the electrode is equivalent to the corresponding values of capacitance and resistance which are connected in parallel or series. The phase shift is 45°, and the impedance component is a linear function of $1/\sqrt{\omega}$ (ω = angular frequency of alternating current). If the capacitance of the double layer (electrode - electrolyte) or the concentration polarization is high, this function becomes more complicated. The authors have detected a property of the active component of impedance as

a function of $1/\sqrt{\omega}$, which may be used to indicate the presence of concentration polarization. It is assumed that if there is no concentration polarization, any electrode can be similated in first approximation by one of the circuit diagrams shown in Fig. 1. The impedance of the electrode is given as $Z_o = R_o - jX_o$ (R_o and X_o = active and reactive component, respectively), and the impedance for each diagram of Fig. 1 and the value for $\lim_{\omega \to 0^\circ} R$ are obtained as follows:

$$Z_{e(1)} = \frac{R}{1+(\omega RC)^2} - j\frac{\omega R^2 C}{1+(\omega RC)^2} = R_{e(1)} - jX_{e(1)}; \quad (1)$$

$$Z_{e(2)} = R - j\frac{1}{\omega C} = R_{e(2)} - jX_{e(2)}; \quad (2)$$

Detection of Concentration Polarization by Measuring the Electrode Impedance

S/076/60/034/008/035/039/XX
B015/B063

$$Z_{e(s)} = \frac{RC_1^2}{\omega^2 R^2 C_1^2 C_2^2 + (C_1 + C_2)^2} - j\frac{\omega^2 R^2 C_1^2 C_2^2 + \omega^{-1}(C_1 + C_2)}{\omega^2 R^2 C_1^2 C_2^2 + (C_1 + C_2)^2} = R_{e(s)} - jX_{e(s)};$$

(3)

$$Z_{e(s)} = \frac{\omega^2 C_1^2 C_2^2 R_1 R_2 (R_1 + R_2) + R_1 C_1^2 + R_2 C_2^2}{\omega^2 (R_1 + R_2)^2 C_1^2 C_2^2 + (C_1 + C_2)^2} -$$

$$- j\frac{\omega C_1 C_2 (R_1^2 C_1 + R_2^2 C_2) + \omega^{-1}(C_1 + C_2)}{\omega^2 (R_1 + R_2)^2 C_1^2 C_2^2 + (C_1 + C_2)^2} = R_{e(s)} - jX_{e(s)};$$

(4)

When an element equivalent to the concentration polarization is introduced into the circuit, the funotion R_0 becomes infinite. Thus, an unlimited increase of R for $\omega \to 0$ indicates the presence of concentration polarization, whereas the tendency of R to a limit shows that it is absent. Hence, the dependence of the active component of the electrode impedance R on $1/\omega$ may serve as a criterion for the presence of concentration polarization at the electrode. Professor B. N. Kabanov is thanked for advice. There are 2 figures and 3 references: 2 Soviet and 1 German.

Card 3/4

Detection of Concentration Polarization by Measuring the Electrode Impedance

S/076/60/034/008/035/039/XX
B015/B063

ASSOCIATION: Akademiya nauk SSSR Institut elektrokhimii (Academy of Sciences USSR, Institute of Electrochemistry)

SUBMITTED: February 6, 1960

$$\lim_{\omega \to 0} R_{e(1)} = R_1 \quad (5)$$

$$\lim_{\omega \to 0} R_{e(2)} = R_1 \quad (6)$$

$$\lim_{\omega \to 0} R_{e(3)} = \frac{RC_1^2}{(C_1 + C_2)^2} < R_1 \quad (7)$$

$$\lim_{\omega \to 0} R_{e(4)} = \frac{R_1 C_1^2}{(C_1 + C_2)^2} + \frac{R_2 C_2^2}{(C_1 + C_2)^2} < R_1 + R_2. \quad (8)$$

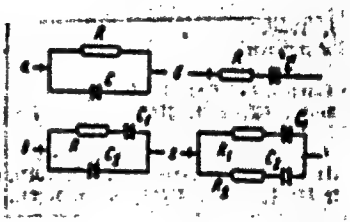


Fig. 1

Card 4/4

KNOTZ, F.

TESAREK, T. CZECHOSLOVAKIA

no academic degree indicated

Oncological Research Institute (Vyskumny ustav onkologicky), Bratislava; Director: corresp. member SAV, docent V. THURZO, MD.

Bratislava, Bratislavske Lekarske Listy, No 8, Oct 62, pp 485-489.

"Replacement of the Oesophagus by a Colon as Palliative Surgery for Carcinoma of the Oesophagus"

Co-authors:

GODAL, A. same as above

JUDIN, J. " " "

KNOTZ, F. " " "

KNOTZ, F.

KNOTZ, F., DVORAK, F.

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1. Z Chirurgickej kliniky LFSU v Kosiciach, prednosta prof. dr. J.Knazovicky.

(ATELECTASIS,
*postop., prev.)
(LUNGS, surgery,
*postop. atelectasis, prev.)

KHOTZ, F.

Carbon dioxide in anesthesia for childre. Rozhl.chir. 34 no.3: 195-197 Mar 55.

1. Z Chirurgickej kliniky v Kosiciach, prednosta prof. Dr J. Knazovicky

(CARBON DIOXIDE, anesthesia and analgesia absorber with readjustment in child.)
(ANESTHESIA, INHALATION carbon dioxide, absorber with readjustment in child.)

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1. Oncological Research Institute, Bratislava
(NEOPLASMA exper.)
(NITROGEN MUSTARDS pharmacol.)
(LIVER neopl.)

UJHAZY,V.; KNOTZ,F.; GODAL,A.; WINKLER,A.

Experimental study of the relationship between the level of serum glutamic oxalacetic transaminase (SGOT) and carcinomatic injury of the liver parenchyma. Neoplasma,Bratisl. 7 no.1: 42-47 '60.

1. Oncological Research Institute, Bratislava,CSR.
(LIVER NEOPLASMS exper.)
(TRANSAMINASES blood)

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1. Vyskumny ustav onkologicky v Bratislave, Krajsky ustav narodneho zdravia v Trnave, Chirurgicka klinika v Kosiciach.
(ANESTHETICS)

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1. Oncological Research Institute, Bratislava, Czechoslovakia.
(NITROGEN MUSTARDS pharmacol) (LIVER pharmacol)
(REGENERATION pharmacol)

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1. Z Vyskumneho ustavu onkologickeho v Bratislave, riaditel doc. MUDr. V. Thurzo.

(GENITALIA FEMALE neopl) (ANESTHESIA)

CZECHOSLOVAKIA

KNOTZ, F.

no academic degree indicated

Oncological Research Institute (Vyskumny ustav onkologicky), Bratislava; Director: corresp. member SAV, docent V. THURZO, MD.

Bratislava, Bratislavske Lekarske Listy, No 8, Oct 62, pp 481-485.

"The Tasks and Problems of Anesthesiology in Clinical Oncology"

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1. Oncological Research Institute, Bratislava, CSSR.
(GASTROINTESTINAL NEOPLASMS) (CYCLOPHOSPHAMIDE)

KHOTZ, F.

Tasks and problems of anesthesiology in clinical oncology. Bratisl. Lek. Listy 42 no.6:481-485 '62.

1. Z Vyskumneho ustavu onkologickeho v Bratislave, riaditel clen koresp. SAV doc. MUDr. V. Thurzo.
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1. Institute of Cancer Research, Bratislava, CSSR.
(SARCOMA, HOSHIDA) (SARCOMA, JENSEN)
(TRIIODOTHYRONINE) (METABOLISM)
(RADIATION EFFECTS)

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The use of Dagranol in combination with surgical treatment in cancer of gastrointestinal tract. Neoplasma 11 no.1:89-93 '64.

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Terminology of acid-base equilibrum. Roshl. chir. 43 no.6: 353-358 Je'64

1. Statne sanatorium v Bratislave (riaditel: MUDr. J.Rusnak, CSc,); I. chirurgicka klinika Lekarskej fakulty UK [University Komenskeho] v Bratislave (prednosta: prof. dr. K.Caraky); Onkologicky vyskumny ustav v Bratislave (riaditel: akademik V.Thurso); Klinika chirurgie detskeho veku Lekarskej fakulty UK [University Komenskeho] v Bratislave (prednosta: prof. dr. M. Kratochvil, CSc.).

KNOTZOVA, K.

WINKLER, Alojz; UJHAZY, Vilian; KNOTZOVA, Kornelia; SORM, Frantisek

The level of 6-azouracile in the serum of rats. Neoplasma, Bratisl. 5 no.2:97-100 1958.

1. Oncological Research Institute, Bratislava. Chemical Institute of the Czechoslovak Academy of Sciences, Praha. Authors' address: Dr. A. Winkler and co-workers, Bratislava, ul. Cs. armady 17; akademik F. Sorm, Praha, Chemicky ustav CSAV.

(URACIL, antag.
6-azouracil, retention in blood in rabbits)
(CYTOTOXIC SERUMS, in blood,
6-azouracil, retention in rabbits)

KNOURKOVÁ, Eva; MACK, Zdenek, ins.

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1. Neurologicke oddeleni OUNZ Uh. Hradiste, prednosta prim.dr. A. Strnad. KHBS v Gottwaldove, oddeleni v Uh. Hradisti, virologicke laborator, prednosta prim.dr. J.Valihrach.
(NEUROLOGY)
(ORNITHOSIS compl)

KNUBOVETS, R.G.; MASLENNIKOV, B.M.

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1. Submitted March 9, 1965.

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1. Kafedra fakul'tetskoy khirurgii (zav. - prof. I.F.Kharitonov) Kazanskogo meditsinskogo instituta.

KNUBOVETS, S. Ya.

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1. Kafedra fakul'tetskoy khirurgii (zav. - prof. I.F.Kharitonov) Kazanskogo meditsinskogo instituta.

KNUBOVETS, Ya. S.

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KNUBOVETS, Ya.S., kandidat meditsinskikh nauk.

Immobilising loose teeth in amphodontosis. Stomatologiia no.1: 54-55 Ja-F '54. (MLRA 7:1)

1. Iz kafedry stomatologii (zaveduyushchiy - professor P.M. Kartashov) Kazanskogo Gosudarstvennogo instituta dlya usovershenstvovaniya vrachey (direktor - doktor meditsinskikh nauk I.V.Danilov). (Teeth-diseases)

KNUBOVETS, Ya.S.

Some structural changes in the alveolar process and the teeth of the lower jaw due to the compression of the inferior alveolar nerve in dogs. Nauch. trudy Kaz. gos. med. inst. 14:215-216 '64. (MIRA 18:9)

1. Kafedra ortopedicheskoy stomatologii (zav. - prof. I.M. Oksman) Kazanskogo meditsinskogo instituta.

KNUBOVETS, Ya.S., dotsent

Changes in the mineral metabolism in the teeth and in the alveolar process of the mandible following stimulation of the nerves of the masticatory muscles. Vop. obshchei stom. 17:86-89 '64.

Method of the fixation of prosthesis in total absence of teeth. Ibid.:104-106 (MIRA 18:11)

OKSMAN, I.M., prof.; KOROVKIN, V.A., dotsent

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(MIRA 18:11)

KHUBOVETS, Ya.S., kandidat meditsinskikh nauk

Method of determining central occlusion of the teeth. Stomatologiia no.2:51-51 Mr-Ap '55. (MLRA 8:5)

1. Iz kafedry stomatologii (zav. prof. P.N.Kartashov) Kazanskogo gosudarstvennogo instituta usovershenstvovaniya vrachey imeni V.I. Lenina (dir. prof. I.V.Danilov).
(TEETH,
determ. of central occlusion)

KOPEYKIN, Vadim Nikolayevich; KRUKOVETS, Yakov Samuilovich; KURLYANDSKIY Veniamin Yur'yevich; OKSMAN, Isaak Mikhaylovich; KALONTAROV, D.Ye., kand. med. nauk, red.; KOROLEV, A.V., tekhn. red.

[Technique of prosthodontics] Zuboprotesnaia tekhnika. [By] V.N.Kopeikin i dr. Moskva, Izd-vo "Meditsina," 1964. 343 p. (MIRA 17:4)

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SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

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Report U-1612, 3 Jan. 1952

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"Economics of the synthetic materials industry" by N.P.Fedorenko. Reviewed by I.Knunyants, M.Fedorovich. Vop. ekon. no.8:120-122 Ag '62. (MIRA 15:8)

(Synthetic products) (Fedorenko, N.P.)

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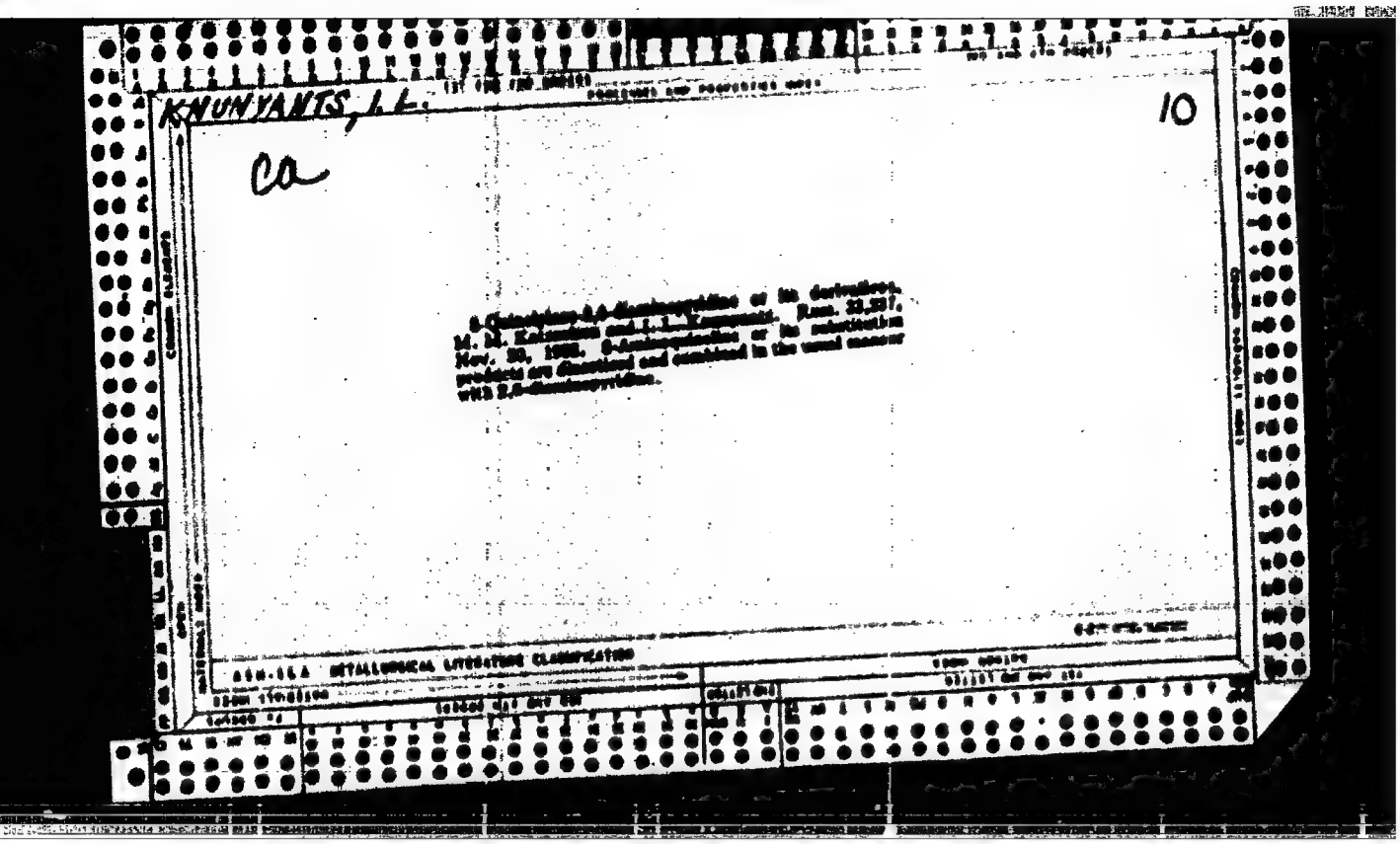
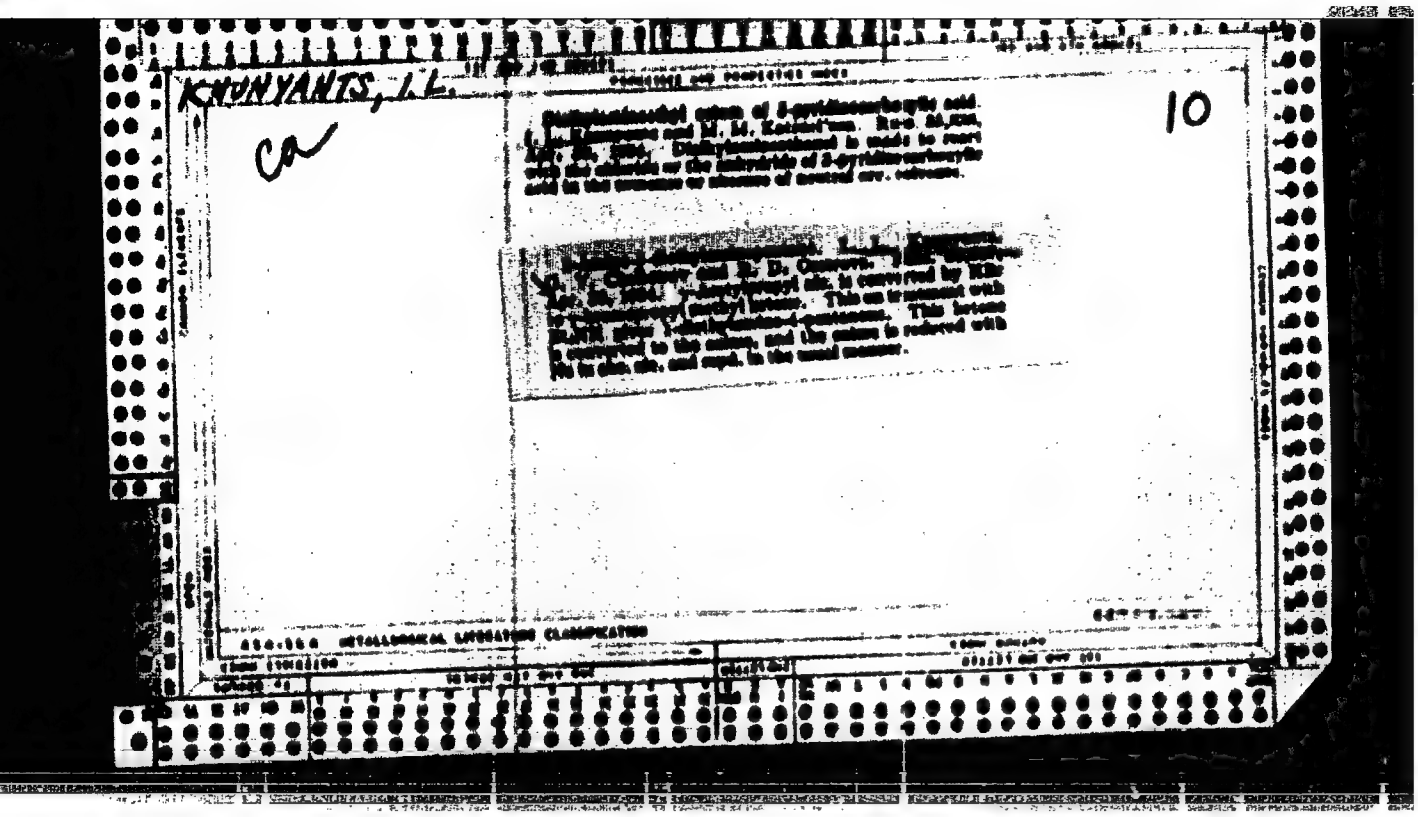
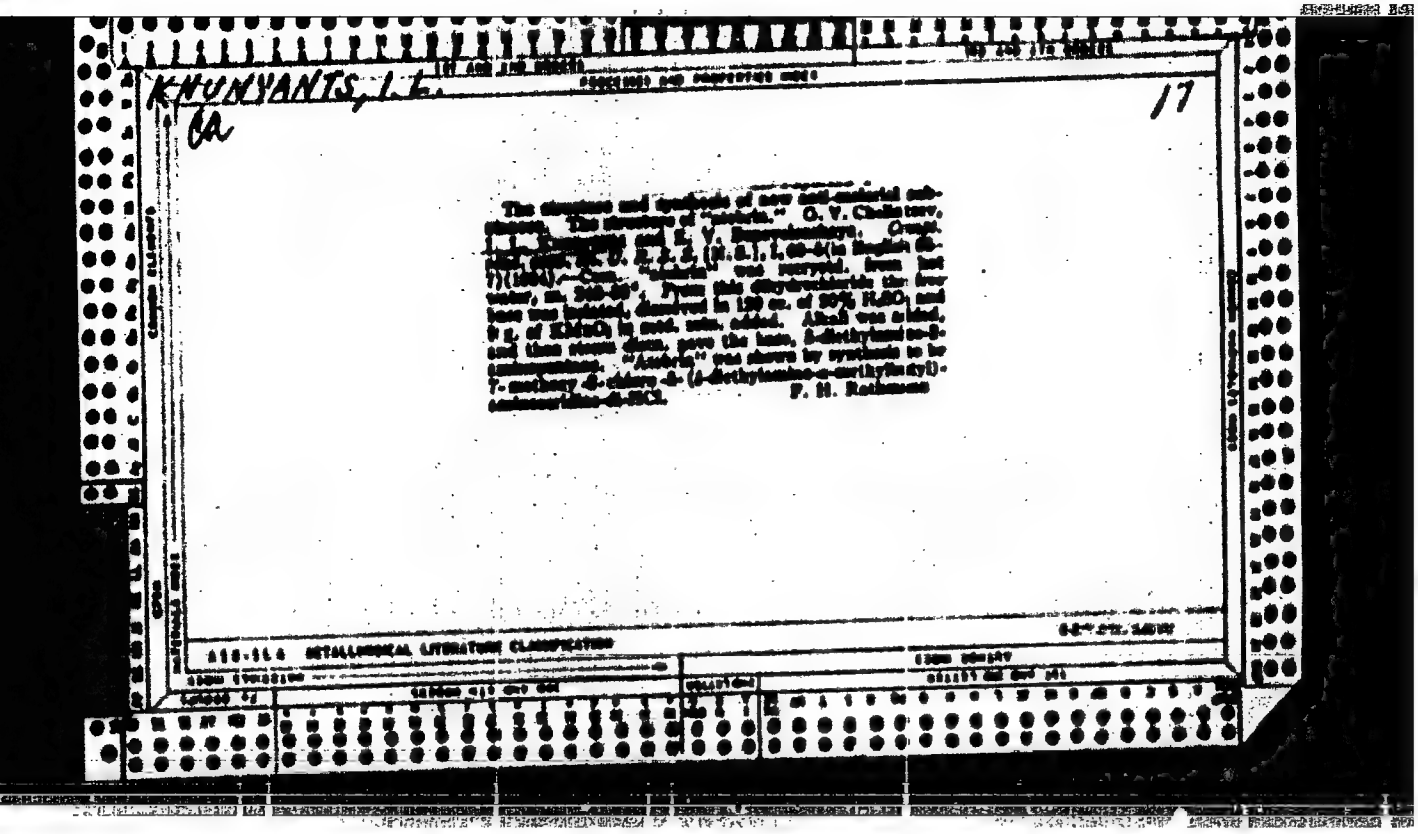
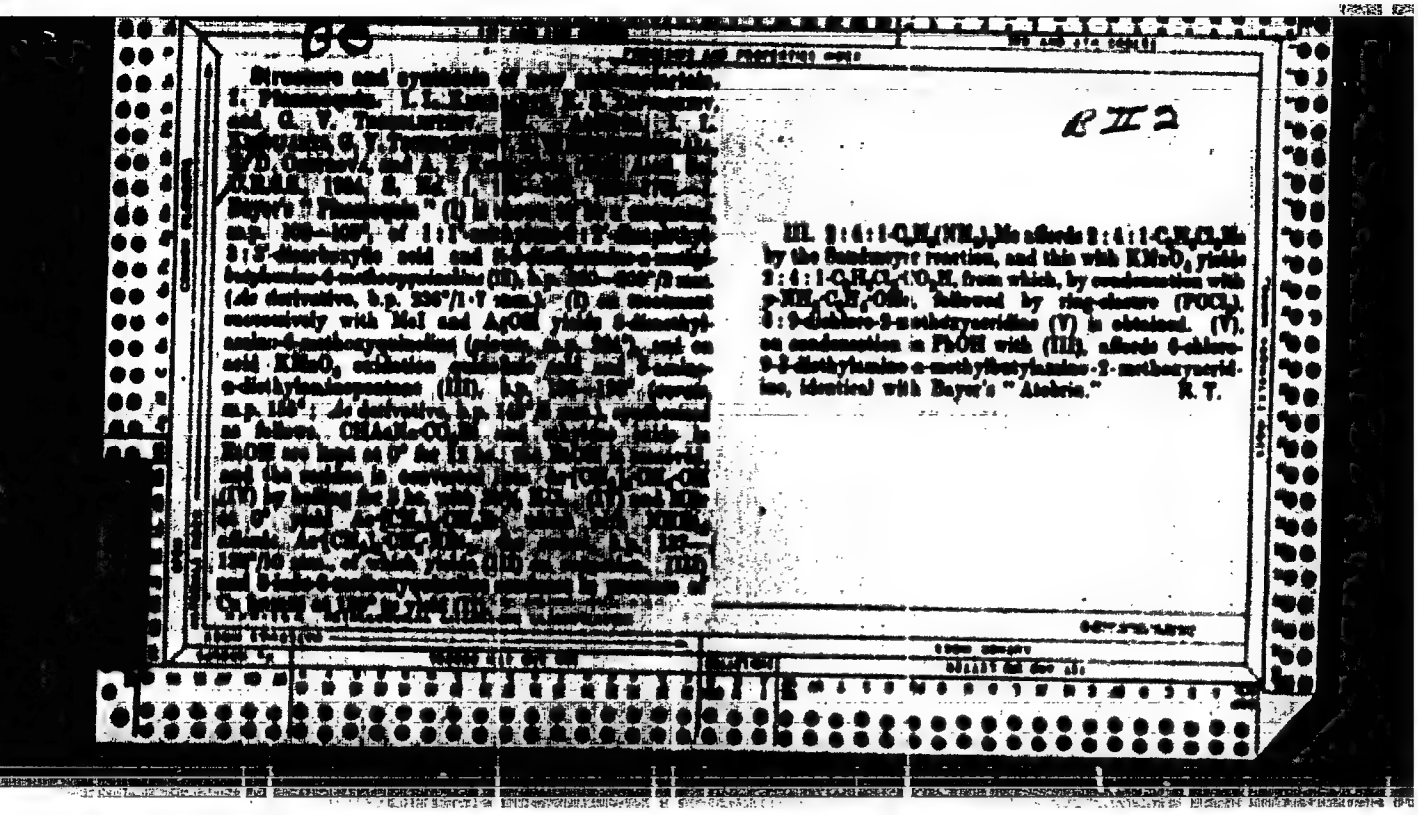
Reactions of perfluoroacrylonitrile. Khim.nauka i prom. 3 no.6:828-829 '58. (MIRA 12:2)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Acrylonitrile)



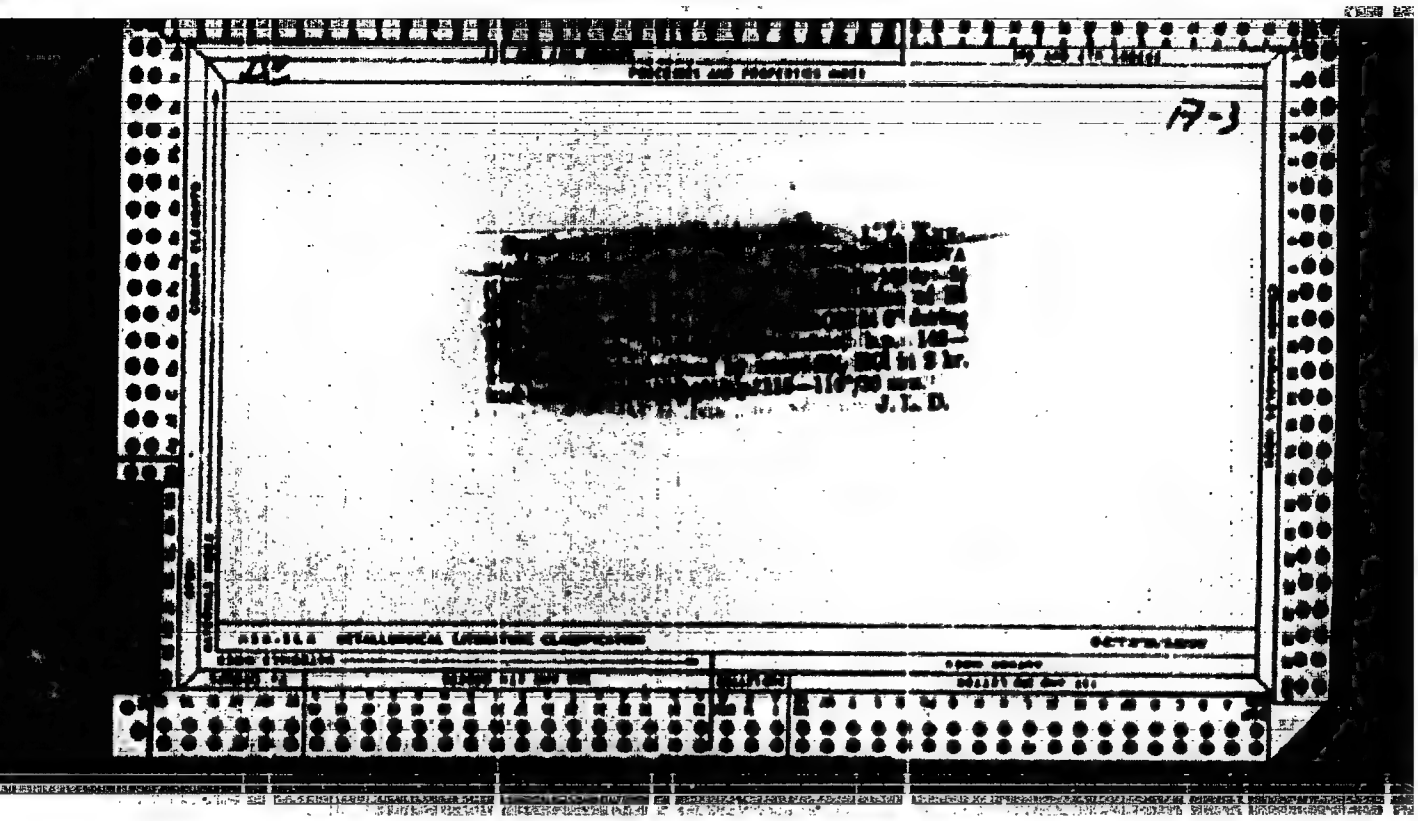


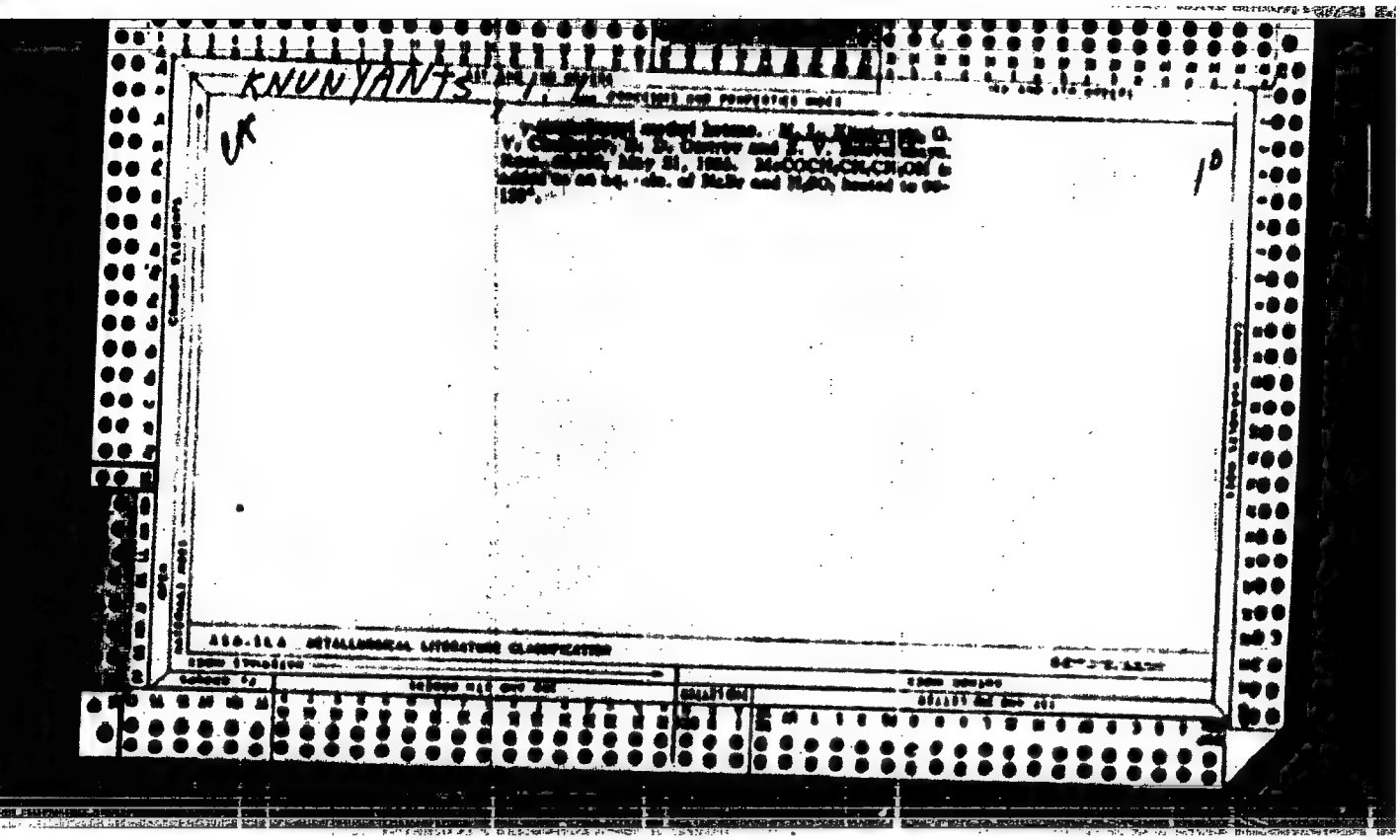


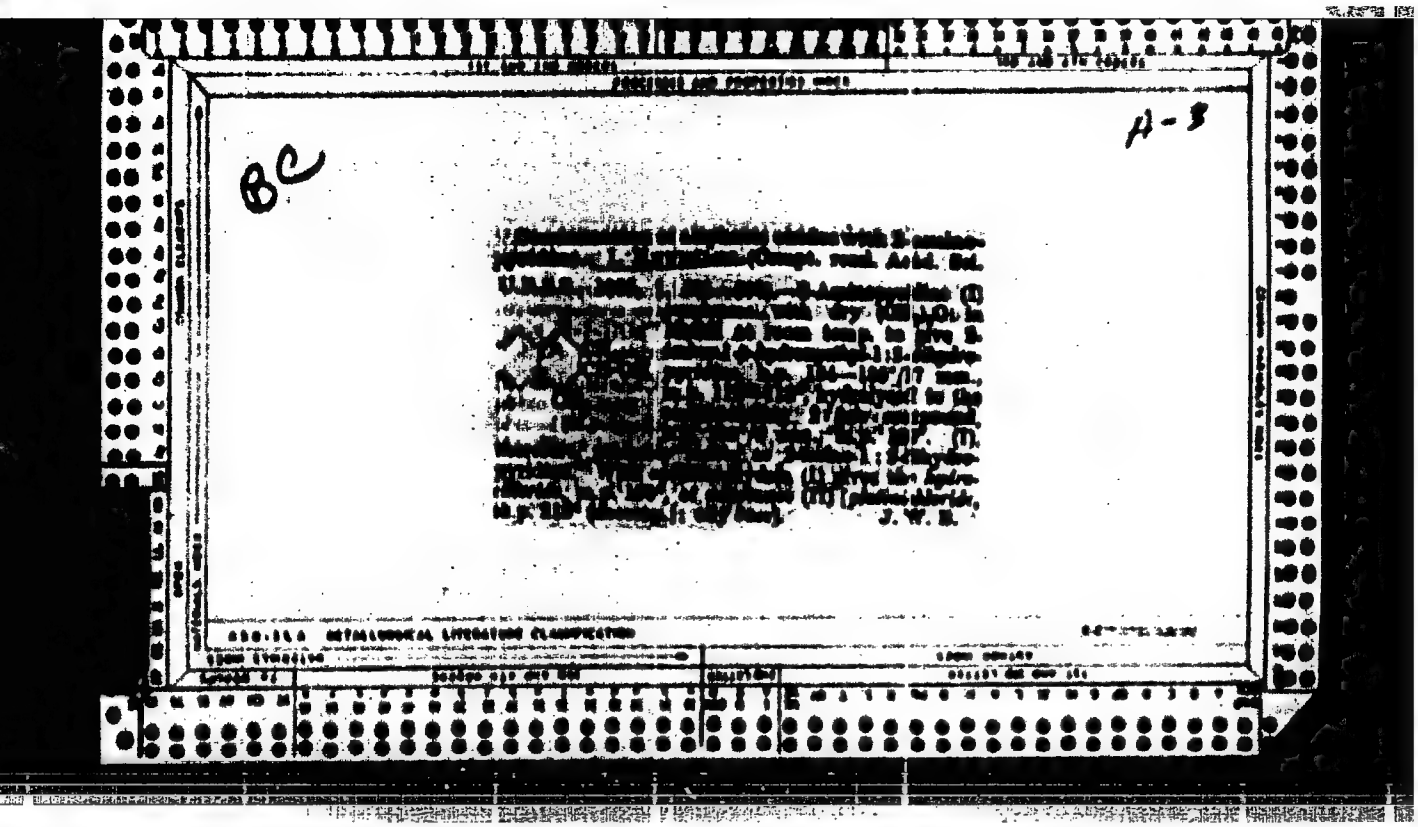


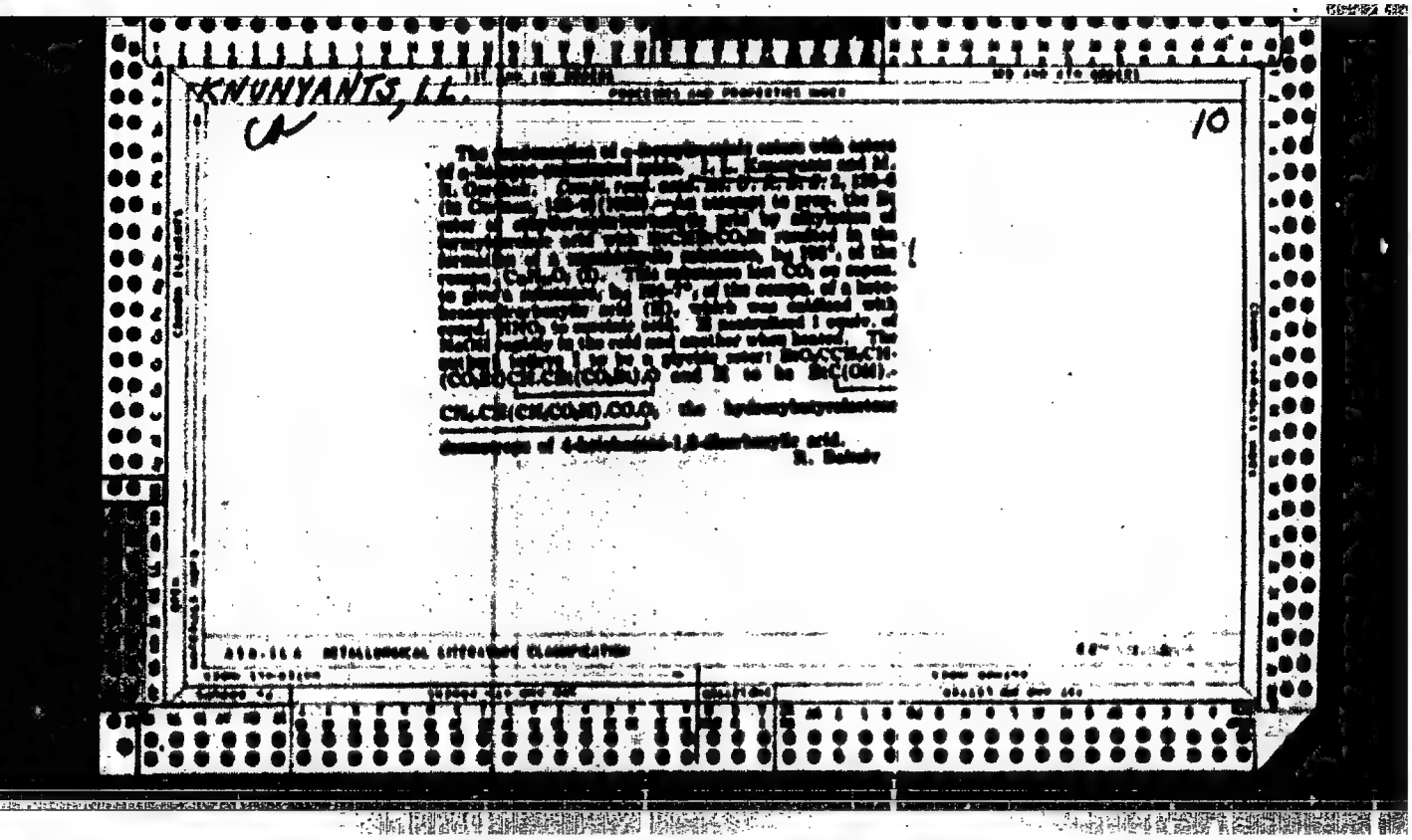
BII 2

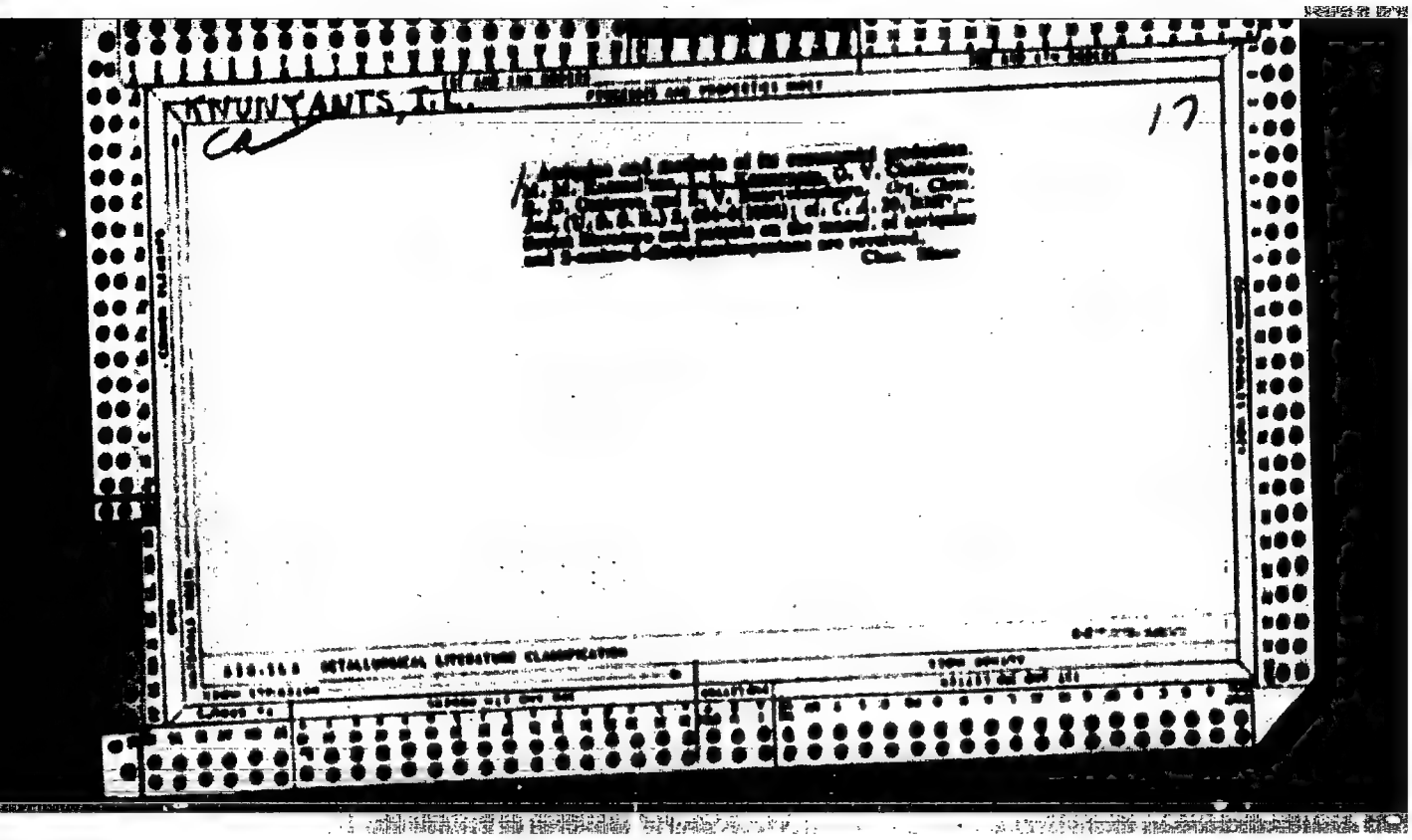
III. 3 : 6 : 1-$C_6H_3(NH_2)_2Me$ affords 3 : 6 : 1-$C_6H_3Cl_2Me$ by the Sandmeyer reaction, and this with $KMnO_4$ yields 2 : 6 : 1-$C_6H_3Cl_2CO_2H$, from which, by condensation with p-$NH_2C_6H_4OEt$, followed by ring-closure ($POCl_3$), 5 : 9-dichloro-2-methylacridine (V) is obtained. (V), on condensation in PhOH with (III), affords 6-chloro-9-3-diethylamino-α-methylbutylamino-2-methoxyacridine, identical with Bayer's "Atebrin." R. T.











KNUNYANTS, I.L.

Syntheses in the field of antimalarial substances. (Dialkylaminoalkyl)amine derivatives of the benzothiazole series. I. L. Knunyants and Z. V. Benevolenskaya. *J. Gen. Chem.* (U.S.S.R.) 7, 2471-7(1937); cf. Bethenfalvy, *C. A.* 31, 1779. —3-Nitro-4-acetaminoanisole and P_2S_5 give *3-nitro-4-thioacetaminoanisole* (I) m. 101-2°. When I is boiled with acid or alkali, S is split off hydrolytically. When I is oxidized with $K_3Fe(CN)_6$, it forms *6-methoxy-7-nitro-2-methylbenzothiazole* m. 180-90°. With $SnCl_2$ and HCl, this is reduced to the corresponding amine m. 98-9° (*HCl salt* m. 214-16°), which reacts with $Et_2N(CH_2)_3Cl$ HCl (II) to give *6-methoxy-7-(γ-diethylaminopropylamino)-2-methylbenzothiazole* (III), b_2 200-10° (*HCl salt* m. 186-7°). Methoxy-o-nitroaniline and HCO_2H give *3-nitro-4-formaminoanisole*, m. 130-1°, which with P_2S_5 gives *3-nitro-4-thioformaminoanisole*, m. 180-2°. This is hydrolyzed by HCl but not by alkalies. It is not oxidized by $K_3Fe(CN)_6$ and so cannot be used to obtain a benzothiazole deriv. 3-Nitro-4-aminoanisole and $(CO_2Et)_2$ give *p-methoxy-o-nitrooxanil ester*, m. 137°, which with P_2S_5 gives *p-methoxy-o-nitrothiooxanil ester*, m. 8?°. Saponn. gives the *acid*, m. 122°, which is oxidized by $K_3Fe(CN)_6$ to *6-methoxy-7-nitrobenzothiazole-2-carboxylic acid*. When this is heated with HCl it gives *6-methoxy-7-nitrobenzothiazole*, m. 151°. The corresponding amine, m. 180° (*HCl salt*, m. 206-8°), is obtained by reduction and in turn unites with II to form *6-methoxy-7-(γ-diethylaminopropylamino)benzothiazole*, b_2 213-15° (IV). Although III and IV closely resemble their quinoline analogs in chem. and phys. properties, they have no antimalarial action. H. M. L.

ALS-SLA METALLURGICAL LITERATURE CLASSIFICATION

KNUNYANTS, I.L.

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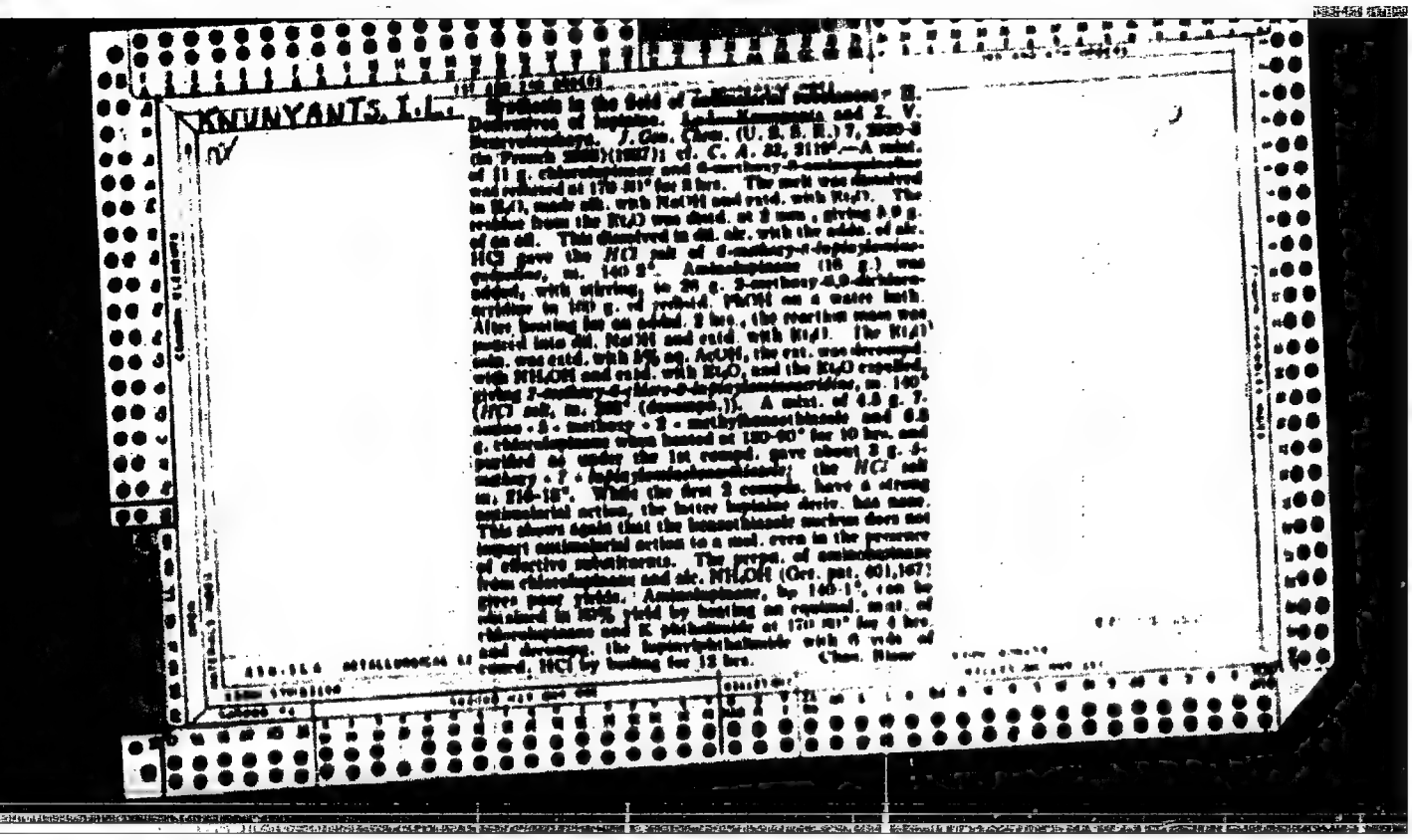
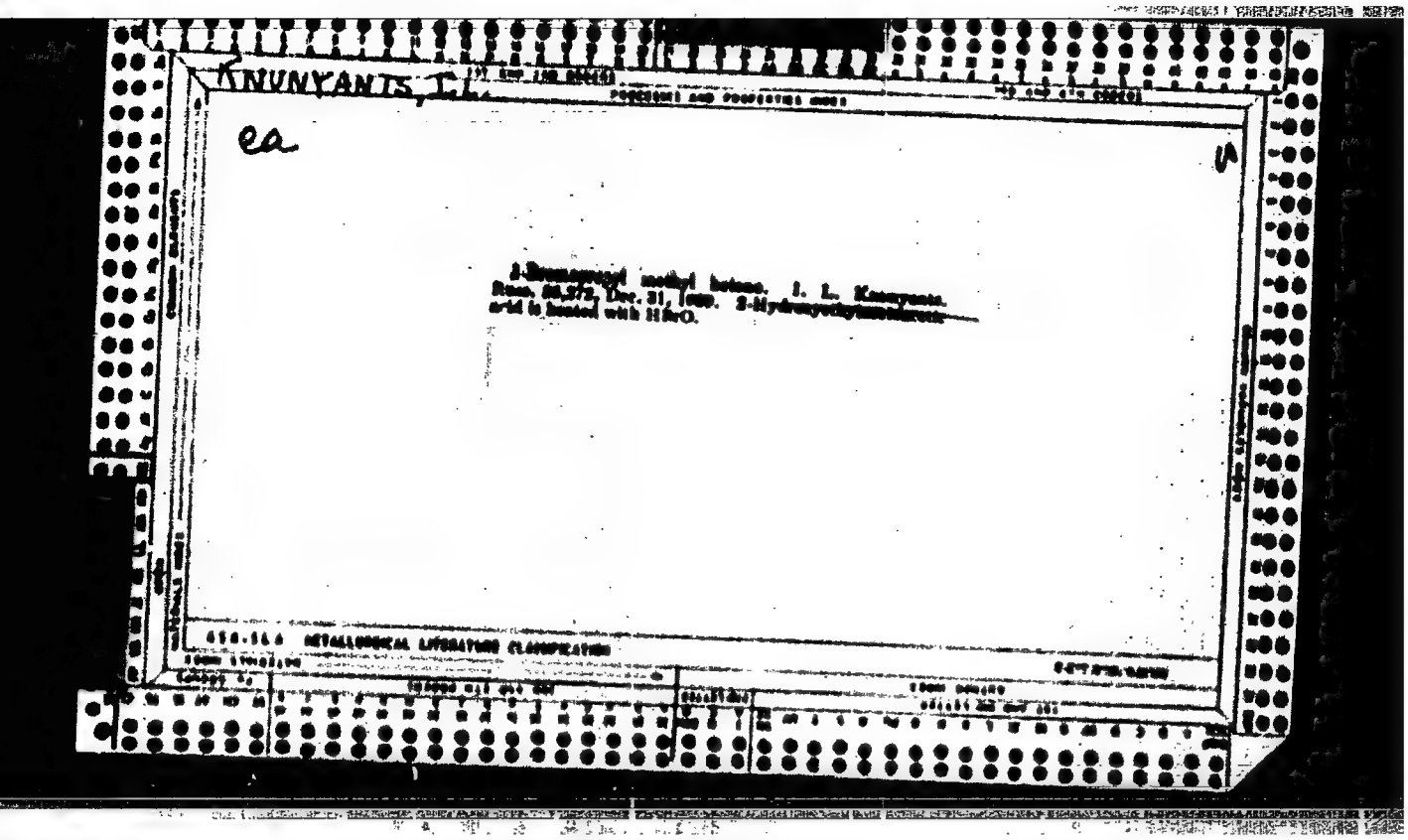
The alkylation of acetoacetic ester in aqueous solution. I. L. Knunyants. J. Gen. Chem. (U.S.S.R.) 7, [illegible] (1937). The condensation of $AcCH_2CO_2Et$ (I) and ethylene oxide described by Knunyants, Chelintsev and Osetrova (C. A. 28, [illegible]) goes equally well in aq. KOH. Similarly, if I is dissolved in 20% KOH soln. and stirred with Me_2SO_4 below 40°, [illegible]% of the pure Me deriv. is obtained. EtBr also gives good results. Malonic esters can be alkylated in a similar way, but stronger KOH soln. must be used. H. M. L.





KNUNYANTS, I. L.

CA

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Lab. of Organic Chem., Military Acad. of Chemical Defence of the Red Army im. Voroshilov, Moscow.

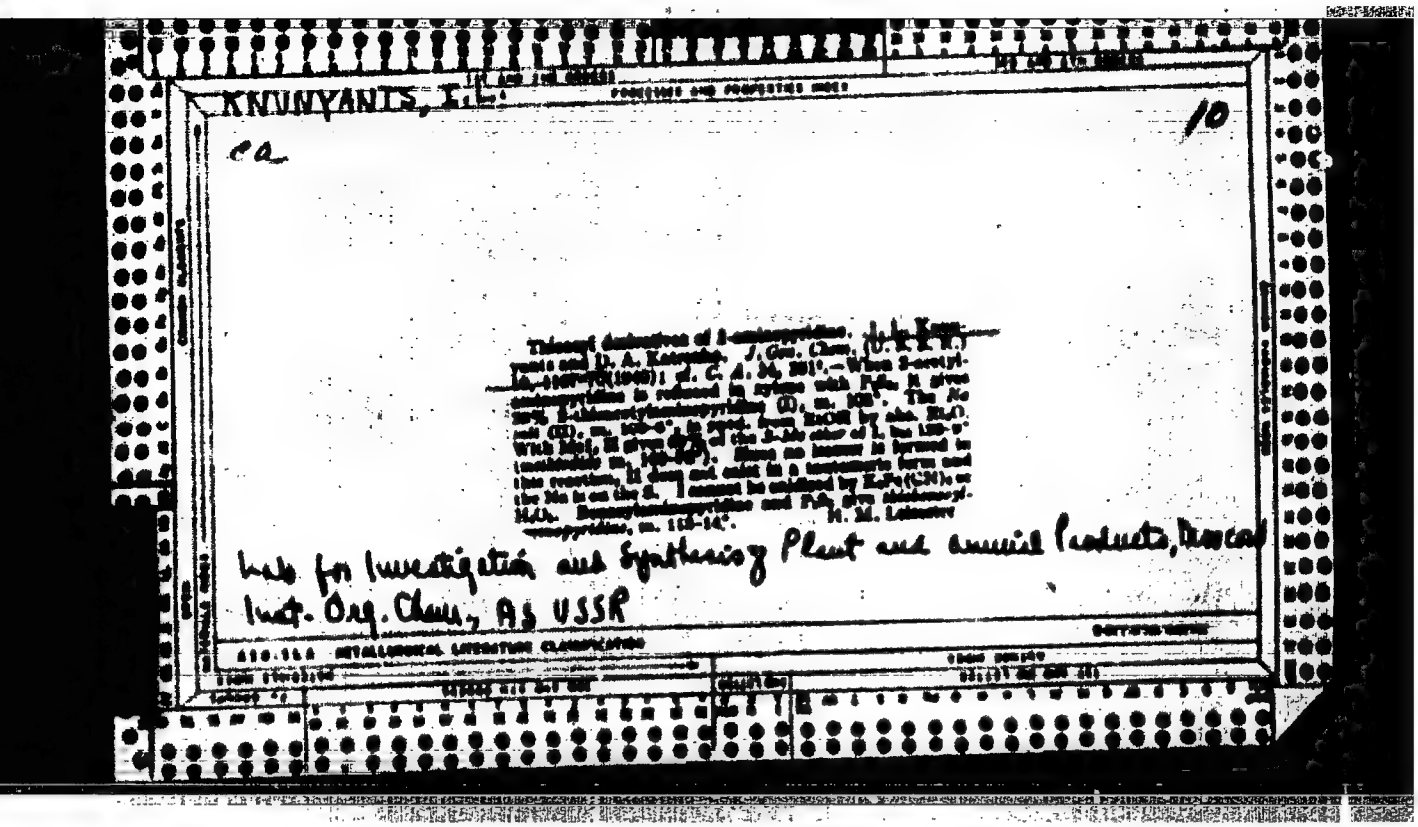
Thioacyl derivatives of primary amines. (The synthesis of acyclic carbocyanine dyes.) I. L. Knunyants and L. V. Kazvadovskaya. *J. Gen. Chem.* (U. S. S. R.) 9, 557-70 (1939).—$PhCH_2NHAc$ heated with P_2S_5 in C_6H_6 gives [illegible] thioacetylbenzylamine, m. 71°. When this is refluxed with MeI it gives 100% thioacetylbenzylamine S-Me ether-HI, m. 166-8°, from which KOH liberates 64% of the free base, b. 115-8°, d [illegible] 1.0674, n_D 1.5930, M. R. calcd. 53.141, M. R. found, 53.6. When this is mixed with MeI at −10° for 2 hrs. and then allowed to stand at room temp. for 2.5 days, it gives 30% of thioacetylbenzylamine S-Me ether.MeI (I), m. 121°. By a similar series of reactions starting from MeNHAc are obtained 43% thioacetylmethylamine, m. [illegible]°, 100% thioacetylmethylamine S-Me ether-HI, m. 110°, 60.5% of its free base, b. 122-3°, d [illegible] 0.9136, n_D 1.092, and the methiodide (II), a hygroscopic solid. I and II condense with $HC(OEt)_3$, [illegible] (III), [illegible] (IV), [illegible] aldehyde anil (V) and $Me_2NC_6H_4CHO$ (VI) in the presence of acetates to give acyclic carbocyanine dyes which are similar to the analogous dyes prepd. from thiazole compds. The compd. from I and III is yellow and has an absorption max. at 420 mμ. I and IV give a red dye, absorption max. [illegible] mμ, sensitizing max. for an AgBr emulsion max. [illegible] mμ. I and V give a blue-green dye, absorption at 610 mμ, sensitizing max. 670 mμ. The [illegible] absorption max. [illegible] mμ, sensitizing max. [illegible] normally changes to a violet dye, absorption max. [illegible] mμ, sensitizing max. [illegible] mμ, but sometimes, for unexplained reasons, this change does not occur. I and VI give an orange-red dye, absorption max. [illegible] mμ. Similarly, II and III give a yellow dye, absorption max. [illegible]; II and IV give a clear red dye, absorption max. [illegible] mμ, sensitizing max. [illegible] mμ, and II and VI give a clear orange-red dye with absorption max. at 475 mμ.

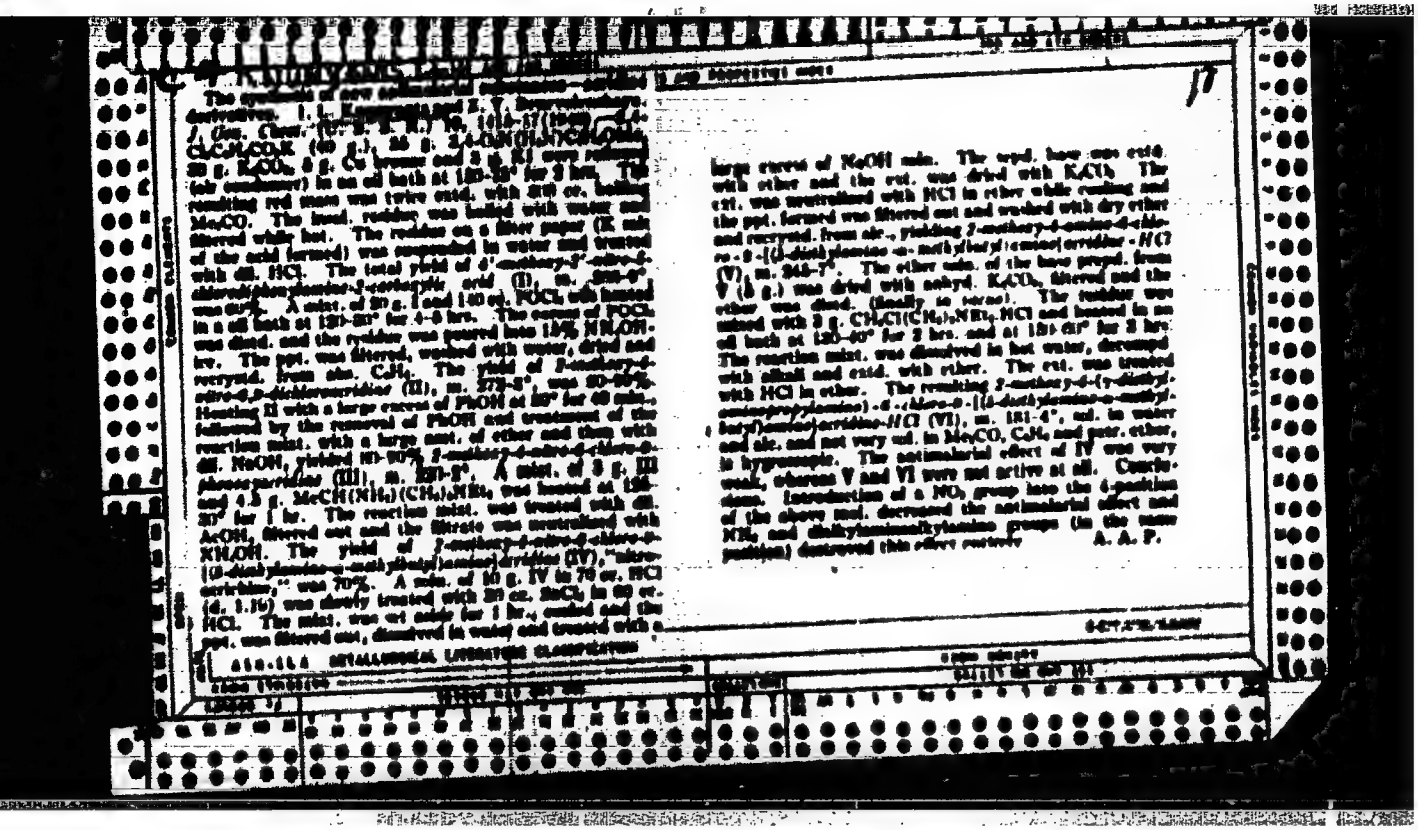
H. M. Leicester

410.114 METALLURGICAL LITERATURE

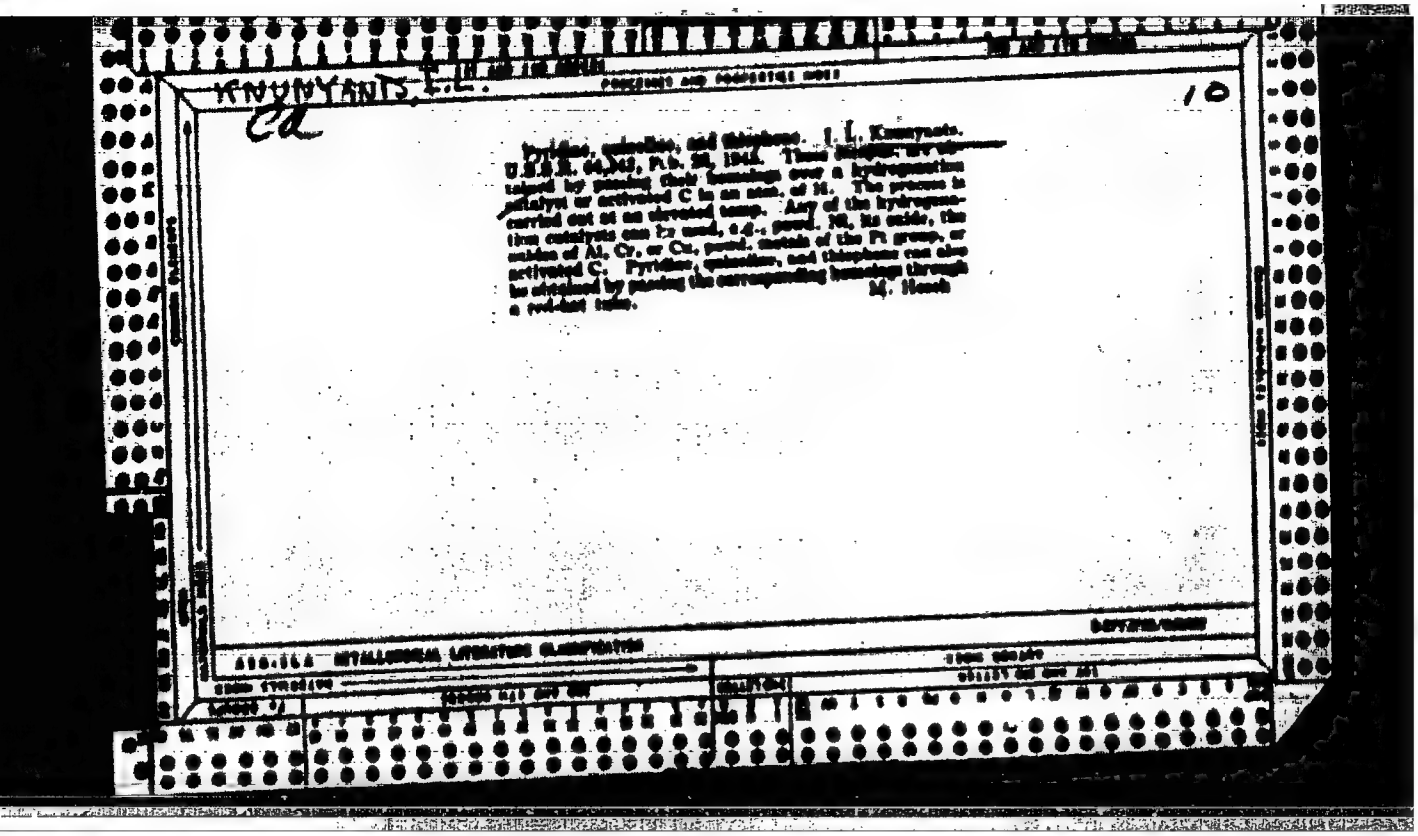
KNUNYANTS, I. L.

"1-Phenyl-3-Methylpyrazolone," T. G. Aleksandrov, B. M. Dubinin, I. L. Knunyants, and G. V. Chelintsev. Russ. 57,506, July 31, 1940. $PhNHNH_2.HCl$ is treated with the reaction product of AcOEt and Na.





large excess of NaOH soln. The ppd. base was extd. with ether and the ext. was dried with K_2CO_3. The ext. was neutralized with HCl in ether while cooling and the ppt. formed was filtered out and washed with dry ether and recrystd. from abs. Me_2CO, yielding 3-methoxy-4-amino-6-chloro-2-[(β-diethylamino-α-methylethyl)amino]acridine·HCl (V), m. 245–7°. The ether soln. of the base ppted. from V (5 g.) was dried with anhyd. K_2CO_3, filtered and the ether was distd. (finally in vacuo). The residue was mixed with 3 g. $ClH_2C(CH_2)_2NEt_2$·HCl and heated in an oil bath at 120–40° for 2 hrs. and at 180–90° for 2 hrs. The reaction mixt. was dissolved in hot water, decolorized with alkali and extd. with ether. The ext. was treated with HCl in ether. The resulting 3-methoxy-6-[γ-diethylaminopropylamino]-6-chloro-2-[(β-diethylamino-α-methylethyl)amino]acridine·HCl (VI), m. 181–4°, sol. in water and alc. and not very sol. in Me_2CO, C_6H_6 and gen. ether, is hygroscopic. The antimalarial effect of IV was very weak, whereas V and VI were not active at all. Conclusion. Introduction of a NO_2 group into the 6-position of the above mol. decreased the antimalarial effect and NH_2 and dialkylaminoalkylamino groups (in the same position) destroyed this effect entirely. A. A. P.


KNUNYANTS, I. L.

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Pyridine, quinoline, and thiophene. I. L. Knunyants.
U.S.S.R. 64,743, Feb. 28, 1945. These heterocyclics are obtained by passing their homologs over a hydrogenation catalyst or activated C in an atm. of H_2. The process is carried out at an elevated temp. Any of the hydrogenation catalysts can be used, e.g., powd. Ni, its oxide, the oxides of Al, Cr, or Cu, powd. metals of the Pt group, or activated C. Pyridine, quinoline, and thiophene can also be obtained by passing the corresponding homologs through a red-hot tube.
M. Hosch

KNUNYANTS, I. L.

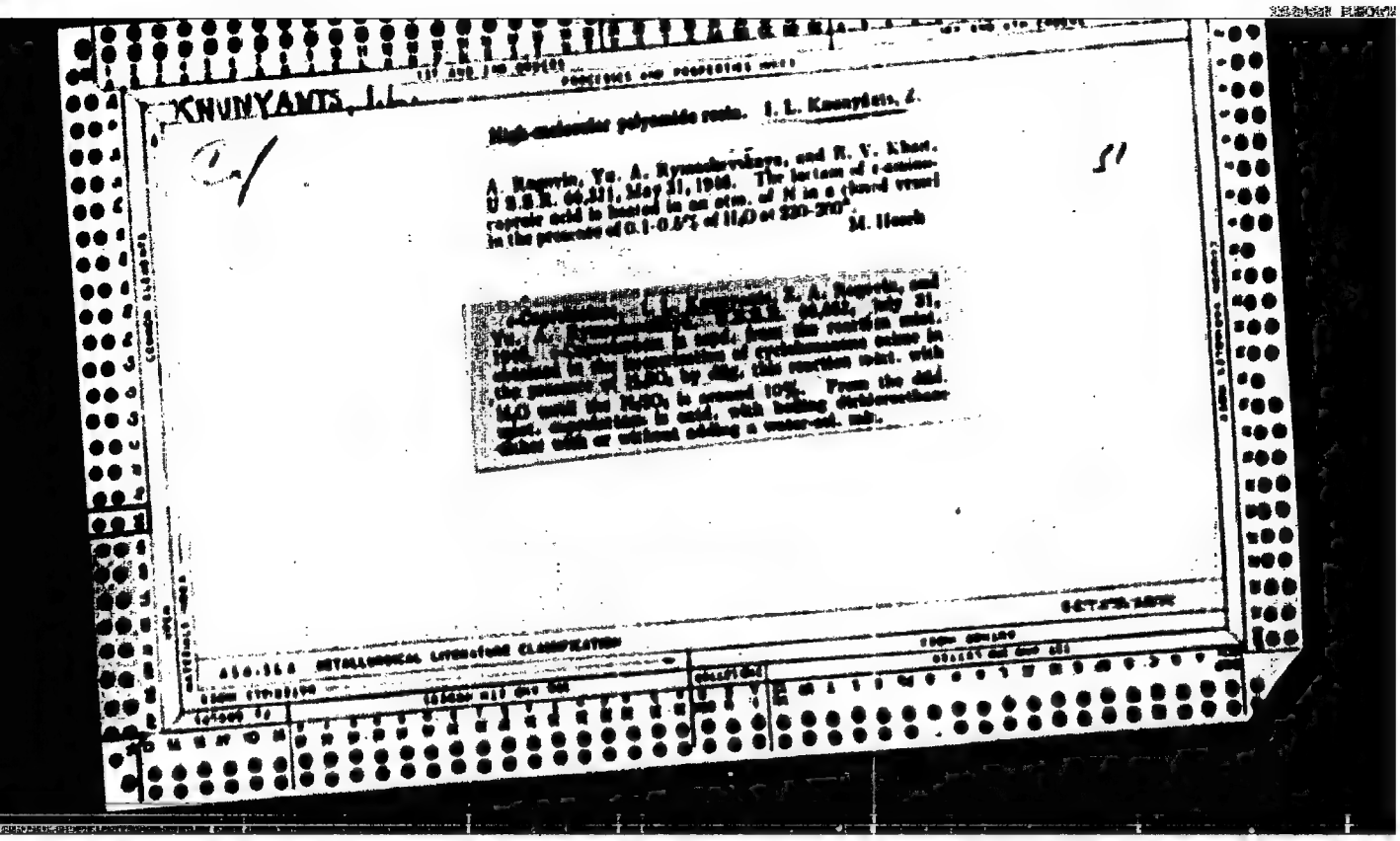
PROCESSES AND PROPERTIES INDEX

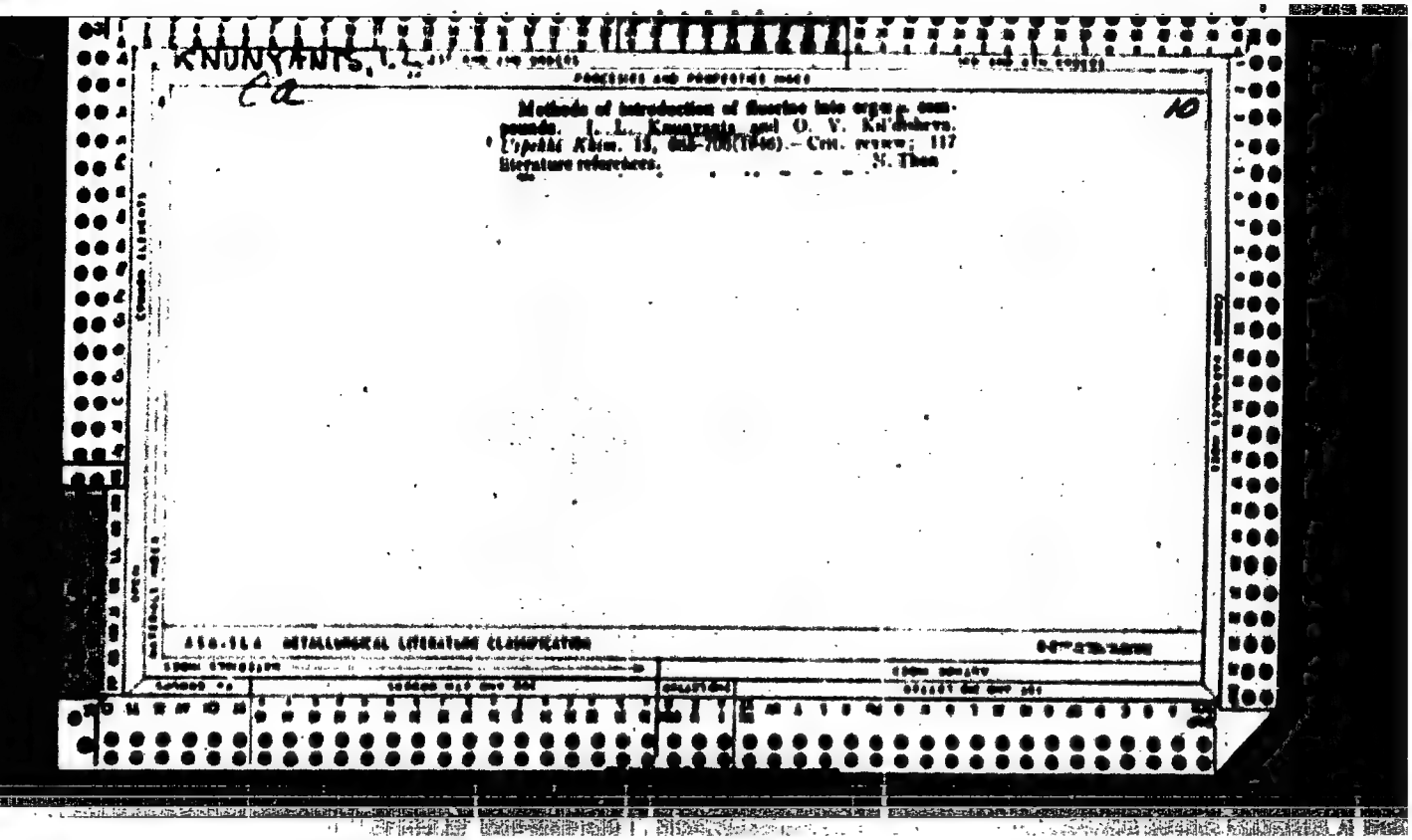
Syntheses in the field of new antimalarial substances. Derivatives of glutaconaldehyde. I. L. Knunyants and T. Ya. Kefeli. *J. Gen. Chem.* (U.S.S.R.) 18, 628-34 (1948)(English summary).—The reaction of aminoquinolines with dinitrophenylpyridinium chloride leads to unsym. amine derivs. of glutaconaldehyde, while the reaction with the pyridine bromocyanide gives the symmetrically constituted dyes. The reaction products obtained from 6-methoxy-8-aminoquinoline with pyridine bromocyanide, analogous to certain antimalarials and differing from these in constn. along the C chain between the amino groups, were not active antimalarials. 1-(2,4-Dinitrophenyl)pyridinium chloride (3 g.) and 5.6 g. 6-methoxy-8-aminoquinoline were [illegible] with 18 cc. abs. EtOH and refluxed for 30 min.; after standing 1 hr. there formed a dark-red cryst. ppt., which was filtered off and washed with Et_2O to give [illegible]% *N*-[5-(6-methoxy-8-quinolylamino)-2,4-pentadienylidene]-2,4-dinitroaniline *HCl*, m. 133-4° (from MeOH). A similar reaction, using 6-aminoquinoline gave *N*-[5-(6-quinolylamino)-2,4-pentadienylidene]-2,4-dinitroaniline-*HCl*, violet-red, m. 138-8° (from MeOH); repetition of the latter reaction with boiling for 3.5 hrs. resulted in constn. of the initial ppt. with formation of a green soln.; evapn. of this, extn. of the residue with Me_2CO, and crystn. of the residue from $CHCl_3$ gave *pyridine chloroquinolate* (1-(6-quinolyl)pyridinium chloride), m. 95-100°. 1-(Phenylmethylamino)-1,3-pentadien-5-ol (1.3 g.) in 15 cc. EtOH was mixed with 1.3 g. 6-aminoquinoline in 3 cc. EtOH and allowed to stand for 3 hrs. after which there was slowly added 0.5 cc. concd. HCl to yield the *hydrochloride* of *N*-[5-(6-quinolylamino)-2,4-pentadienylidene]aniline-*MeCl*, (methylphenyl[5-(6-quinolylamino)-2,4-pentadienylidene]ammonium chloride-HCl), red, m. 157-9° (from dil. MeOH and a little HCl). A similar reaction with 6-methoxy-8-aminoquinoline gave the *corresponding Me deriv.*, cherry red, m. 116-17° (from dil. MeOH and HCl). Freshly distd. pyridine (1 g.) and 4.8 g. 6-methoxy-8-aminoquinoline in 25 cc. Et_2O treated with 1.25 g. CNBr in 10 cc. Et_2O, with cooling, gave after several minutes an abundant ppt. of *RNHCH:CHCH.CHCH:NR.HBr* (R = 6-methoxy-8-quinolyl), violet, m. 120-1° (from EtOH); the above reaction with 6-aminoquinoline gave 75.8% of RNHCH:CHCH:CHCH:NRHBr, (R = 6-quinolyl), cherry-violet, m. 128-6° (from EtOH). 1-(2,4-Dinitrophenyl)pyridinium chloride (28 g.) in 200 cc. EtOH was treated with 20 g. 33% Et_2NH, stirred for a few min., warmed for 30 min. to 60-70°; after removal of much of the EtOH, the residue was treated with 150 cc. cold water, filtered, and the filtrate treated with 30% NaOH and extd. with Et_2O to give 25.4% *5-diethylamino-2,4-pentadienal*, b. 150 1°. This aldehyde (1 g.) in 2 cc. EtOH was added to 1.11 g. 6-methoxy-8-aminoquinoline, heated for 10-15 min. to 50-60°, cooled, and then treated with 0.6 cc. concd. HCl; addn. of Et_2O and rubbing induced the product to solidify and yielded *N*-[5-(6-methoxy-8-quinolylamino)-2,4-pentadienylidene]ethylamine *HCl* (diethyl[5-(6-methoxy-8-quinolylamino)-2,4-pentadienylidene]ammonium chloride), m. 61-4°, sol. in water, EtOH, MeOH, and insol. in Et_2O. G. M. Kosolapoff

Inst. Org. Chem., AS USSR

L.S. for Research & Synthesis, [illegible]

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION





KNUNYANTS, I. L.

Ca

10

Methods of introduction of fluorine into organic compounds. I. L. Knunyants and O. V. Kil'disheva. *Uspekhi Khim.* 15, 682-700(1946).—Crit. review; 117 literature references. N. Thon

KHUNIANTZ, I.

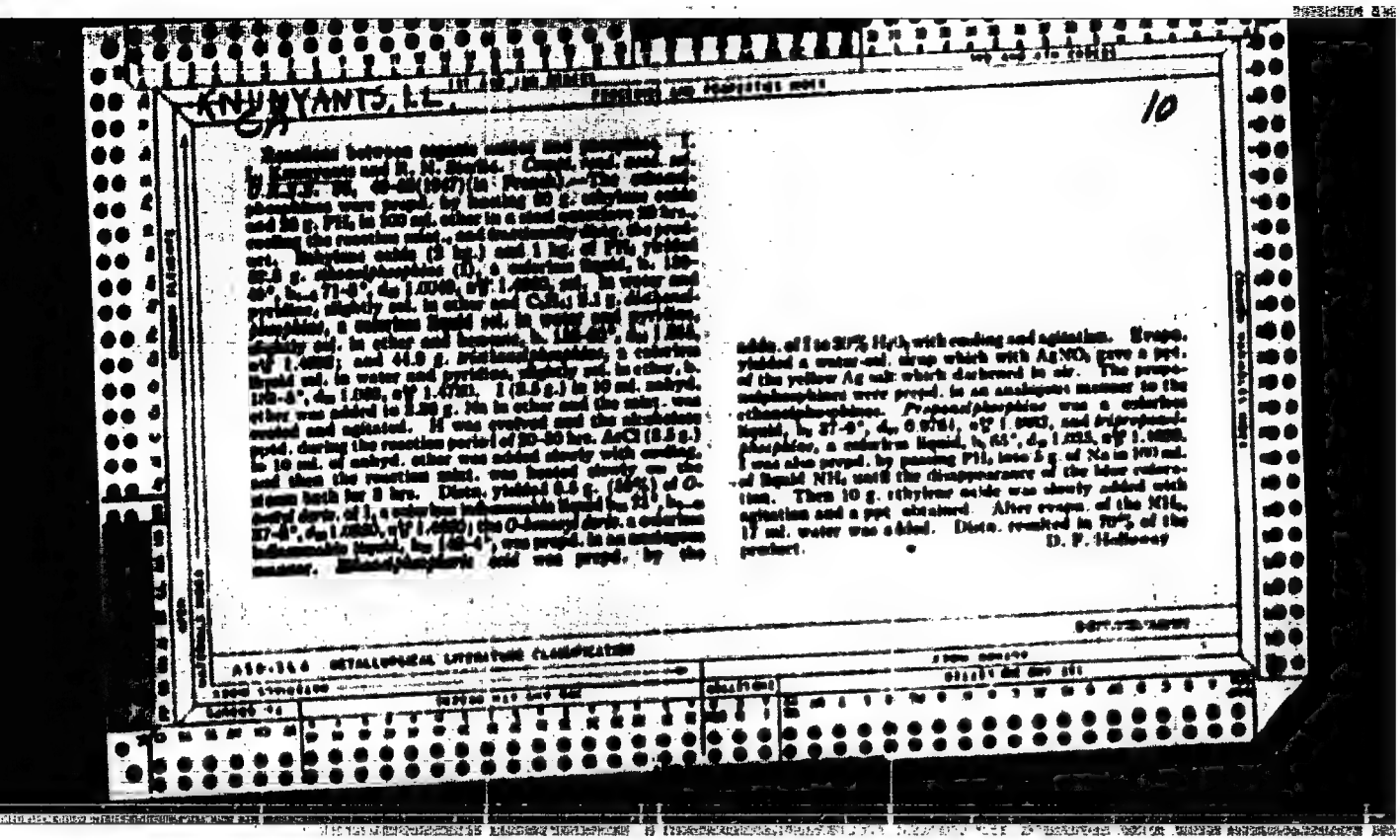
Knuniants, I., Rogovin, I., Rymashevskaya, J., and Height, E.- "Investigation in the field of Polymerizing the Unstable Cycles. I. Investigation of the Polymerization Process of Caprolactam" (p. 992)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1947, Vol. 17, No. 5

KNUNIANTZ, I.

Rogovin, Z., Hight, E., Knuniants, I., and Rymachevskaya, U.- "Investigations in the Field of Polymerization of Unstable Cycles. II. Polymerization of Caprolactam in the Presence of Small Amounts of Water." (p. 1320)

SO: Journal of General Chemistry, (Zhurnal Obshchei Khimii), 1947, Vol. 17, No. 7



KNUNYANTS, I. L.

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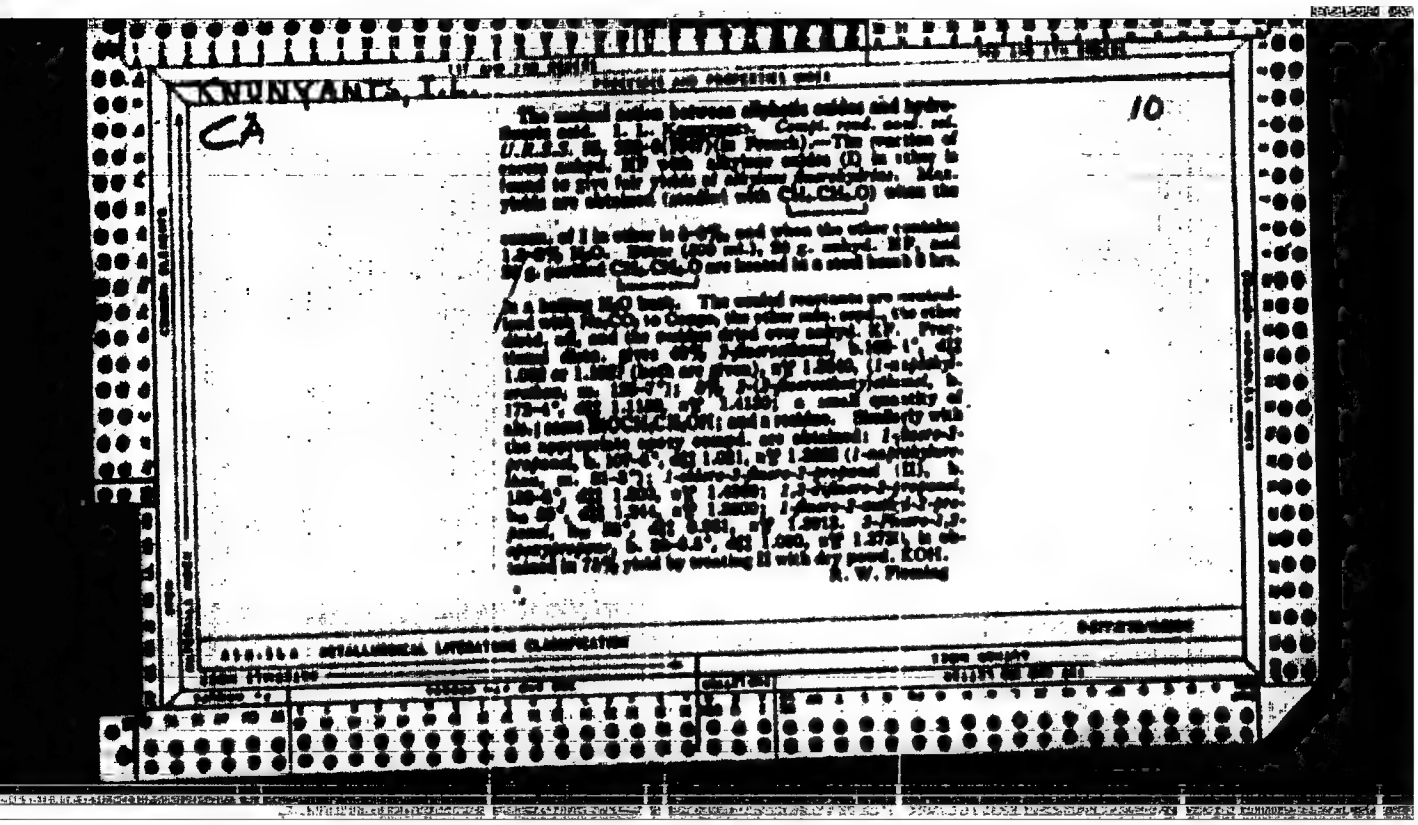
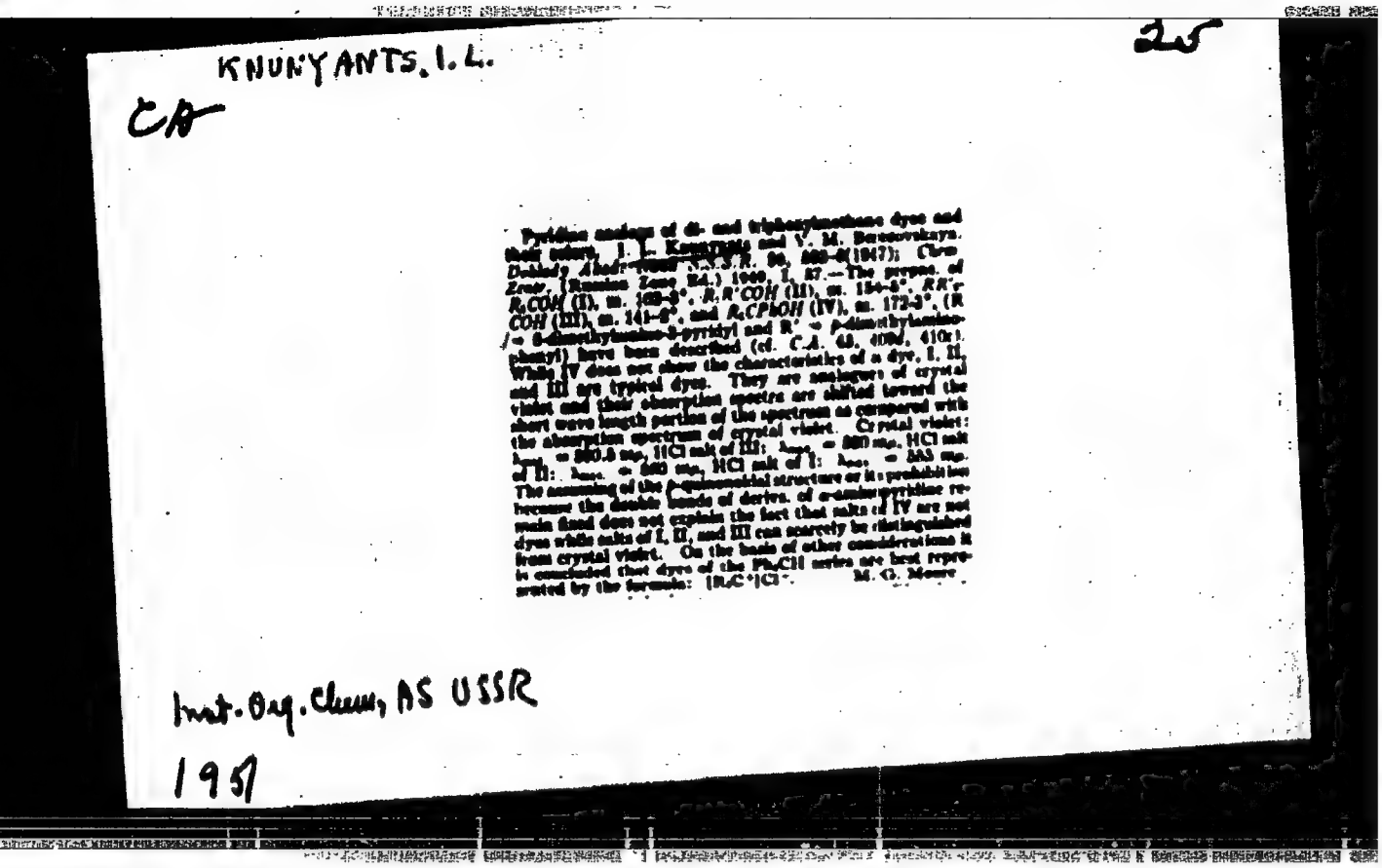
adds. of I to 20% H_2O, with cooling and agitation. Evapn. yielded a water-sol. syrup which with $AgNO_3$ gave a ppt. of the yellow Ag salt which darkened in air. The propoxyethylphosphinic acid was prepd. in an analogous manner to the ethoxyethylphosphinic. *Propoxyethylphosphine* was a colorless liquid, b. 87-9°, d_4 0.9781, n_D^{17} 1.4442, and *dipropoxyethylphosphine*, a colorless liquid, b. 65°, d_4 1.0215, n_D^{17} 1.4388, was also prepd. by passing PH, into 5 g. of Na in 100 ml. of liquid NH_3 until the disappearance of the blue color. Then 10 g. ethylene oxide was slowly added with agitation and a ppt. obtained. After evapn. of the NH_3, 15 ml. water was added. Distn. resulted in 70% of the product.

D. F. Holloway





KNUNYANTS, I. L.

CA

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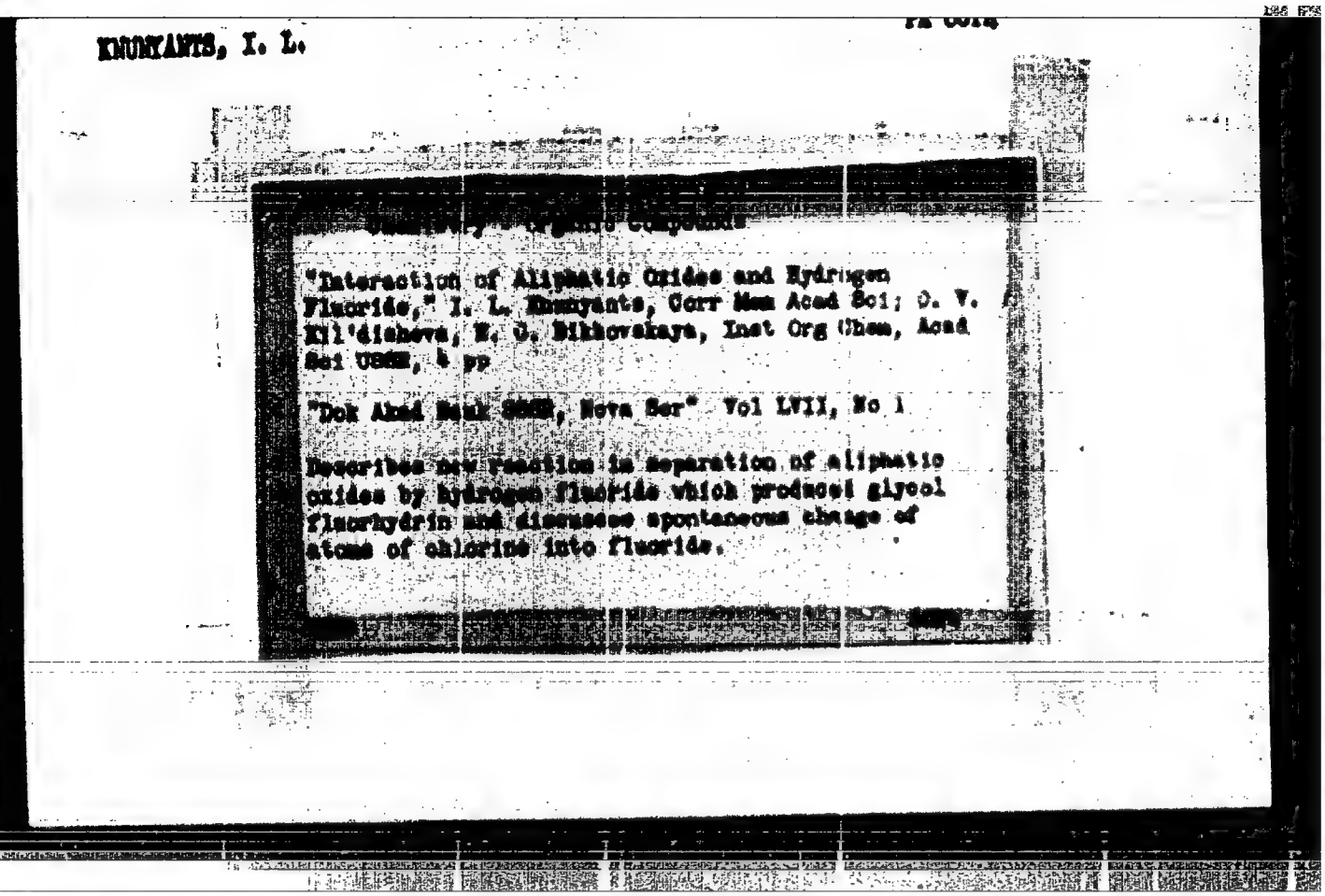
Pyridine analogs of di- and triphenylmethane dyes and their colors. I. L. Knunyants and V. M. Berezovskaya. *Doklady Akad. Nauk S.S.S.R.* 59, 885-8 (1947); *Chem. Zentr.* [Russian Zone Ed.] 1949, I, 87.—The prepn. of R_2COH (I), m. 125-6°, $RR'COH$ (II), m. 154-5°, RR'_2COH (III), m. 141-6°, and R_2CPhOH (IV), m. 172-3°, (R = 2-dimethylamino-5-pyridyl and R' = *p*-dimethylaminophenyl) have been described (cf. *C.A.* 43, 4090f, 6107i). While IV does not show the characteristics of a dye, I, II, and III are typical dyes. They are analogues of crystal violet and their absorption spectra are shifted toward the short wave length portion of the spectrum as compared with the absorption spectrum of crystal violet. Crystal violet: $\lambda_{max.}$ = 590.5 mμ, HCl salt of III: $\lambda_{max.}$ = 580 mμ, HCl salt of II: $\lambda_{max.}$ = 585 mμ, HCl salt of I: $\lambda_{max.}$ = 585 mμ. The assuming of the *p*-quinonoidal structure or its prohibition because the double bonds of derivs. of α-aminopyridine remain fixed does not explain the fact that salts of IV are not dyes while salts of I, II, and III can scarcely be distinguished from crystal violet. On the basis of other considerations it is concluded that dyes of the Ph_2CH series are best represented by the formula: $[R_2C^+]Cl^-$. M. G. Moore

Inst. Org. Chem., AS USSR

1951



KNUNYANTS, I. L.

"Interaction of Aliphatic Oxides and Hydrogen Fluoride," I. L. Knunyants, Corr Mem Acad Sci; G. V. Kil'disheva, M. G. Bikhovskaya, Inst Org Chem, Acad Sci USSR, 4 pp

"Dok Akad Nauk SSSR, Nova Ser" Vol LVII, No 1

Describes new reaction in separation of aliphatic oxides by hydrogen fluoride which produces glycol fluorhydrin and discusses spontaneous change of atoms of chlorine into fluoride.

KNUNYANTS, I. L.

[illegible] Jan 49

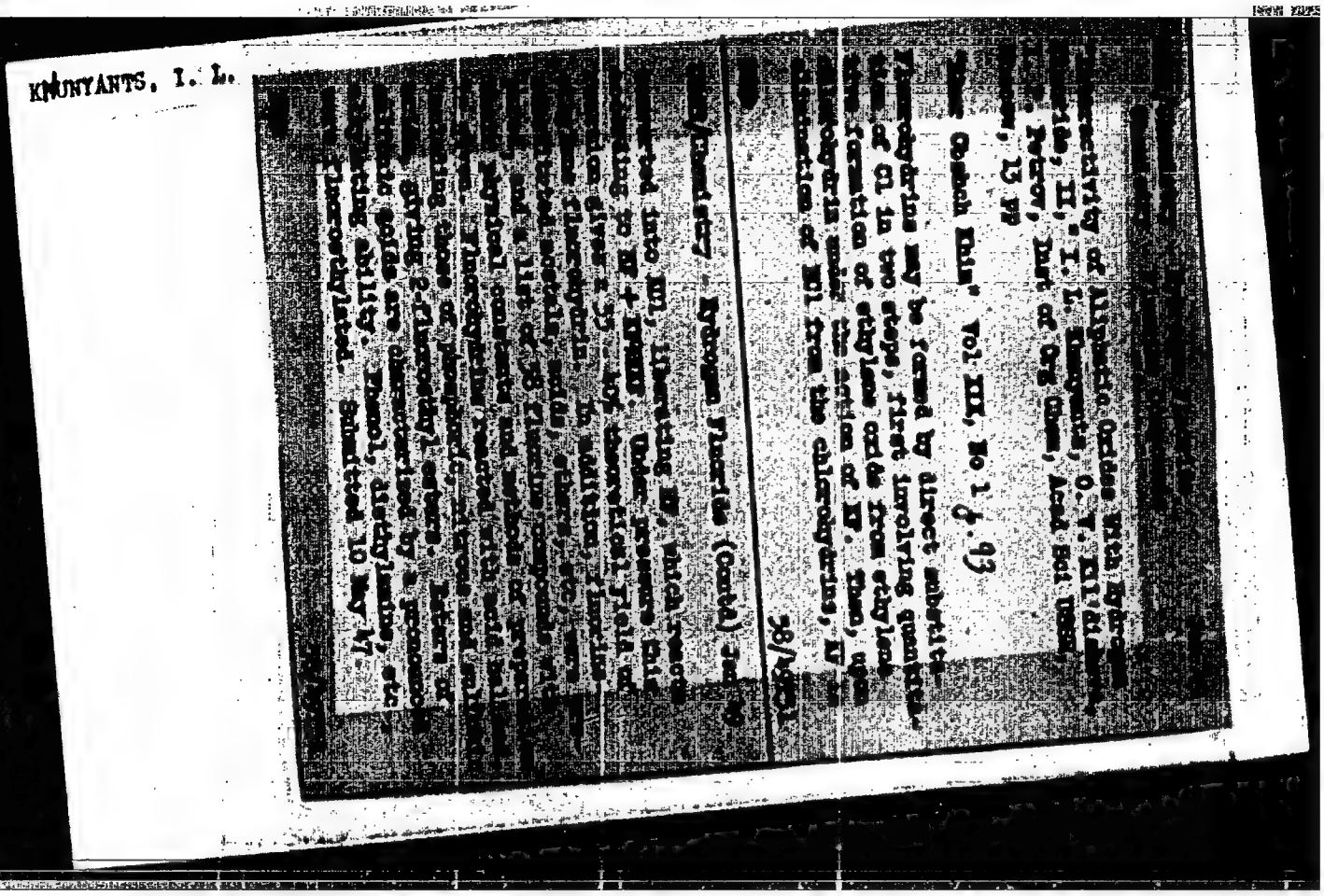
Chemistry - Fluorine Compounds

"Interactivity of Aliphatic Oxides With [illegible] Fluoride," I. L. Knunyants, O. V. [illegible], [illegible] Petrov, Inst of Org Chem, [illegible] Sci USSR, Moscow, 5 1/4 pp

"[illegible] Obshch Khim" Vol XIX, No 1, p 87-91

Aliphatic trioxides react smoothly with anhydrous [illegible] fluoride to form glycol fluorohydrins. During heating, weak solutions of ethers containing the oxides and anhydrous [illegible] give a good yield of ethylenefluorohydrin.

[illegible]



KNUNYANTS, I. L.

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000723320020-2"

KHUNYANTS, I.

PA 27/49T40

USSR/Chemistry - Pharmaceuticals Sep/Oct 48
Chemistry - Organic Compounds, Aromatic

"Academician Vladimir Mikhaylovich Rodionov (on His 70th Birthday)," I. Knunyants, 5 pp

"Iz Ak Nauk SSSR, Otdel Khim Nauk" No 5 p. 465

Congratulatory message to Rodionov, chemist, biochemist, and physiologist, who organized pharmaceutical and aniline-coloring industries in Russia. He specializes in the aromatic series and is particularly interested in β -amino acid.

27/49T40

KNUNYANTS, I. L.

PA 68T46

[redacted] Malonic Acid, Dialdehyde [redacted] Condensation

"Vinylogs of the Dialdehyde of Malonic Acid," I. L. Knunyants, A. I. Shilnikovskiy (Deceased), 5½ pp

Zhur Obshch Khim, Vol XVIII (LXXX), No 2, p 194

[redacted] method for obtaining vinyl homologs by condensation [redacted] dialdehyde of malonic acid with aromatic aldehydes, shows that during condensation of beta-tetrahydroquinolinecryl by malonic acid in solution with an acetic anhydride, there was formed 3(6)-tetrahydroquinoline produced data: 3,5-heptadiene-1,7. Submitted 13 Aug 1946.

KNUNYANTS, I.L., KAL'DISHEVA, O.V., BYKHOVSKAYA, E.

Reactions of Alphatic Oxides with Hydrogen Fluoride, Communication II, Zhurnal Obshchey Khimii, Vol.19, No. 1, 1949, pp 101- 113.

KNUNYANTS, I. L.

PA 8/49T52

USSR/Chemistry - Crystal Violet, Pyridine Apr 48
Analogues of
Chemistry - Dyes

"Dyes of the Di- and Tri-Pyridil-Methane Series, I," I. L. Knunyants, V. M. Berezovskiy, Lab Heterocyclic Compounds, Inst Org Chem, Acad Sci USSR, 7½ pp

"Zhur Obshch Khim" Vol XVIII (LXXX), No 4, p 775

Describes preparation and structure of pyridine analogues of crystal violet. Submitted 17 Mar 1947.

8/49T52

KNUNYANTS, I. L.

PA 8/49T53

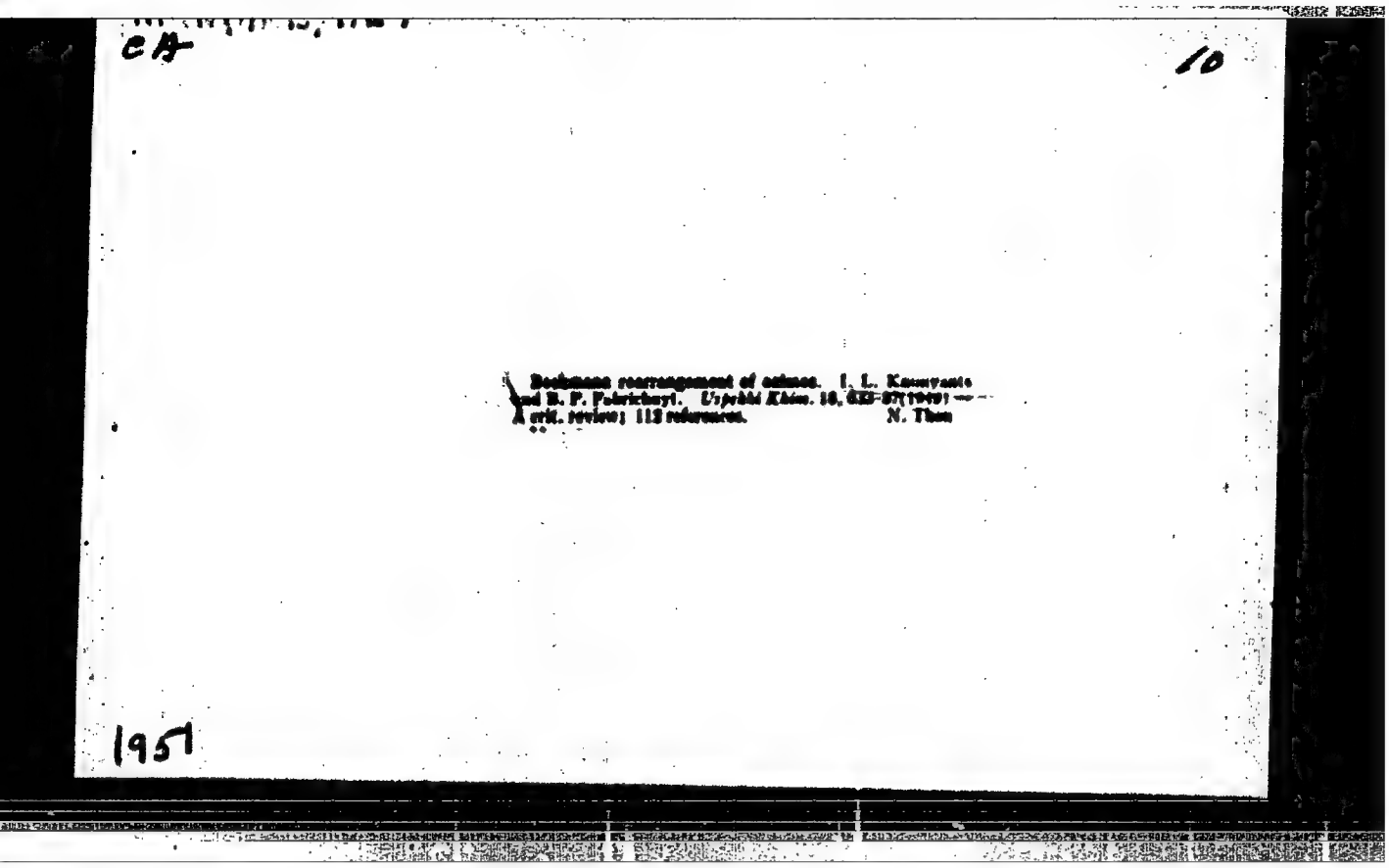
USSR/Chemistry - Dyes Apr 48
Chemistry - Synthesis

"Dyes of the Di- and Tri-Pyridil-Methane Series, II," I. L. Knunyants, V. M. Berezovskiy, Lab Heterocyclic Compounds, Inst Org Chem, Acad Sci USSR, 9¶ pp

"Zhur Obshch Khim" Vol XVIII (LXXX), No 4, 776

Describes synthesis and color of a number of pyridine analogues of di- and triarylmethane dyes. Submitted 17 Mar 1947.

8/49T53



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Beckmann rearrangement of oximes. I. L. Knunyants and B. P. Fabrichnyi. *Uspekhi Khim.* 18, 633-57(1949)— A crit. review; 113 references. N. Thon

1951

KNUNYANTS, I.L.

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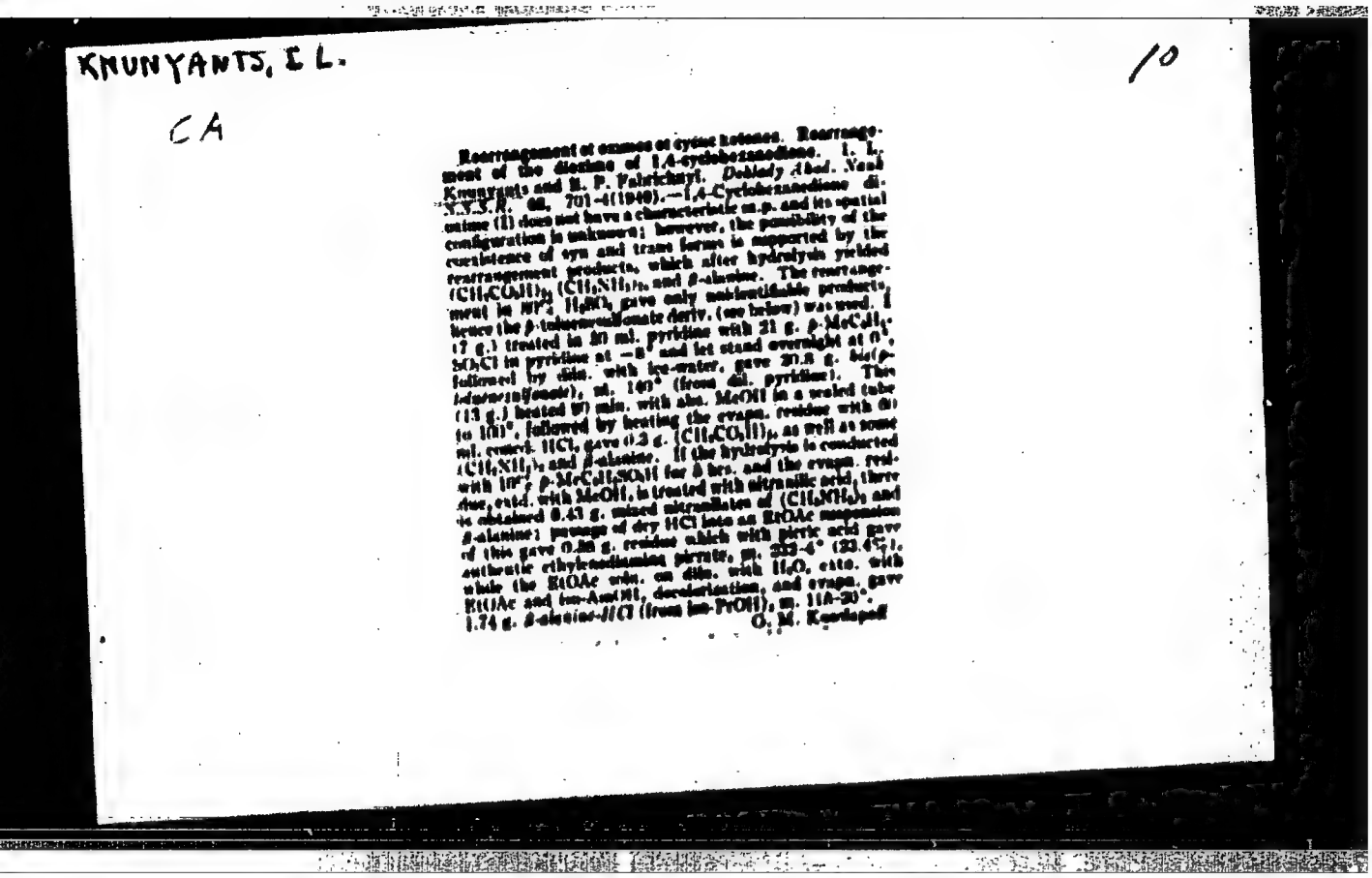
Rearrangement of oximes of cyclic ketones. The rearrangement of 3,4-dihydro-2(1H)-naphthalenone oxime. I. L. Knunyants and B. P. Fabrichnyi. *Doklady Akad. Nauk S.S.S.R.* 66, 523-6(1949).—The 3,4-dihydro-2(1H)-naphthalenone (I) adduct with $NaHSO_3$ with an excess of NH_2OH gave 83% I oxime; the free ketone gives a much poorer yield. The oxime (8.5 g.) in 9.2 ml. dry pyridine treated with 0.5 g. p-$MeC_6H_4SO_2Cl$ in pyridine at −5°, then let stand overnight at 0° and treated with ice, gave 8.2 g. I oxime p-toluenesulfonate, m. 111° (from dil. pyridine). This (12 g.) in 200 ml. MeOH heated in a sealed tube to 100° 0.75 hr., filtered, evapd., and distd. with H_2O gave a tar which, extd. with hot H_2O and neutralized with Na_2CO_3 on cooling, gave 78% o-(2-aminoethyl)phenylacetic lactam (II), m. 120-40° (from H_2O). I (concn. 0.028 g./ml.) in $CHCl_3$ added to 210 ml. HN_3 soln. (concd. H_2SO_4) over 2 hrs. and treated at 35° with 24 ml. concd. H_2SO_4, quenched with ice, and neutralized with NH_4OH, gave 10.4 g. solid, m. 100-8°, resolved by soln. in Me_2CO into 1.15 g. II and 2.1 g. less sol. o-(aminomethyl)-γ-phenylpropionic acid lactam, m. 109-10° (from H_2O).

G. M. Kosolapoff



KHUNYANTS, I. L.

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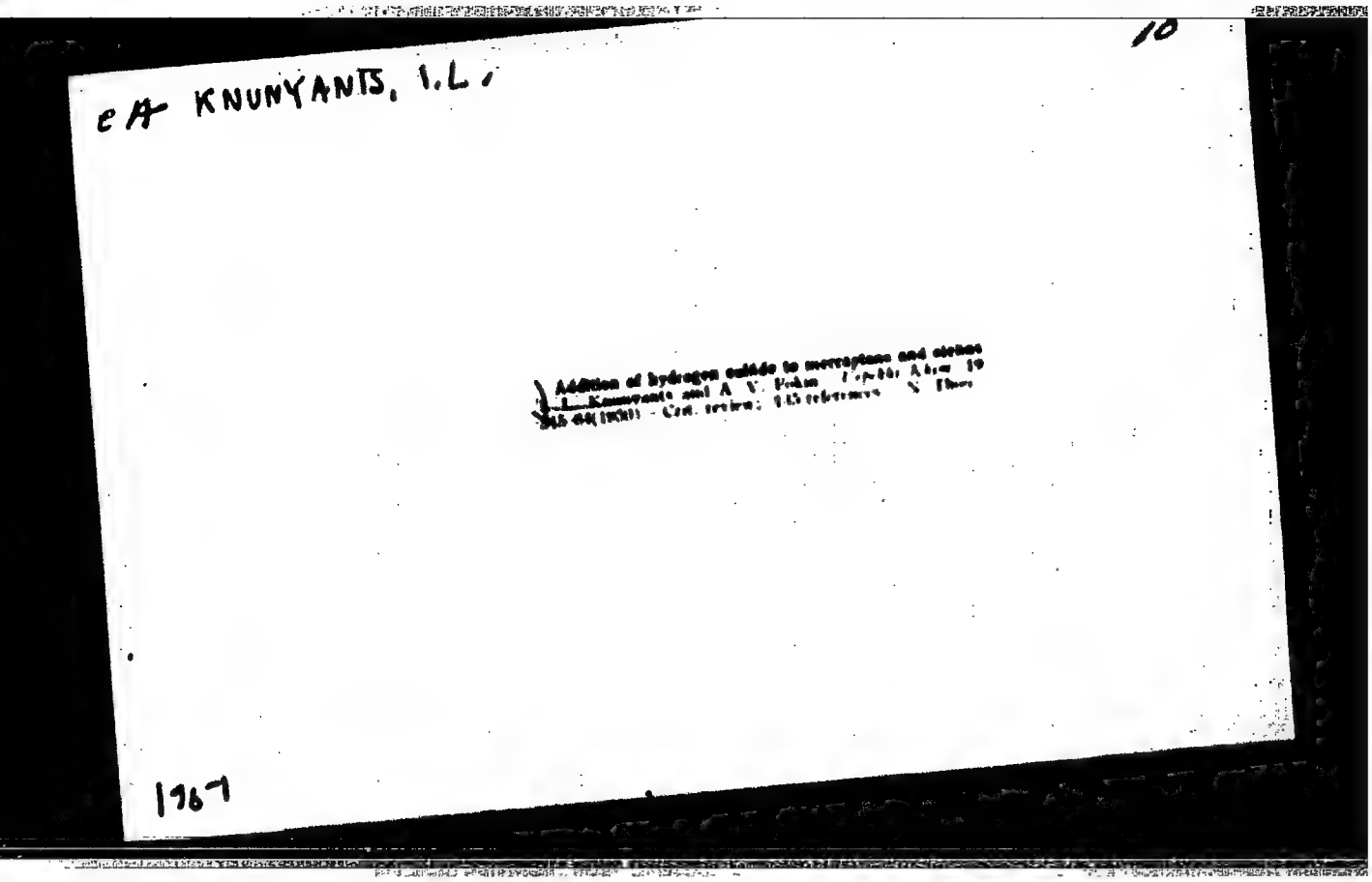
Rearrangement of oximes of cyclic ketones. Rearrangement of the dioxime of 1,4-cyclohexanedione. I. L. Knunyants and B. P. Fabrichnyi. *Doklady Akad. Nauk S.S.S.R.* 68, 701-4(1949).—1,4-Cyclohexanedione dioxime (I) does not have a characteristic m.p. and its spatial configuration is unknown; however, the possibility of the coexistence of syn and trans forms is supported by the rearrangement products, which after hydrolysis yielded $(CH_2CO_2H)_2$, $(CH_2NH_2)_2$, and β-alanine. The rearrangement in H_2O + $HgCl_2$ gave only unidentifiable products, hence the p-toluenesulfonate deriv. (see below) was used. I (7 g.) treated in 20 ml. pyridine with 21 g. p-$MeC_6H_4SO_2Cl$ in pyridine at −5° and let stand overnight at 0°, followed by dil. with ice-water, gave 20.8 g. bis(p-toluenesulfonate), m. 140° (from dil. pyridine). This (13 g.) heated 90 min. with abs. MeOH in a sealed tube to 110°, followed by heating the evapn. residue with dil. concd. HCl, gave 0.2 g. $(CH_2CO_2H)_2$, as well as some $(CH_2NH_2)_2$ and β-alanine. If the hydrolysis is conducted with 10% p-$MeC_6H_4SO_3H$ for 5 hrs. and the evapn. residue, extd. with MeOH, is treated with nitranilic acid, there is obtained 0.43 g. mixed nitranilates of $(CH_2NH_2)_2$ and β-alanine; passage of dry HCl into an EtOAc suspension of this gave 0.38 g. residue which with picric acid gave authentic ethylenediamine picrate, m. 232-4° (23.4% I, while the EtOAc soln. on dil. with H_2O, extn. with EtOAc and iso-AmOH, decolorization, and evapn. gave 1.74 g. β-alanine·HCl (from iso-PrOH), m. 118-20°.

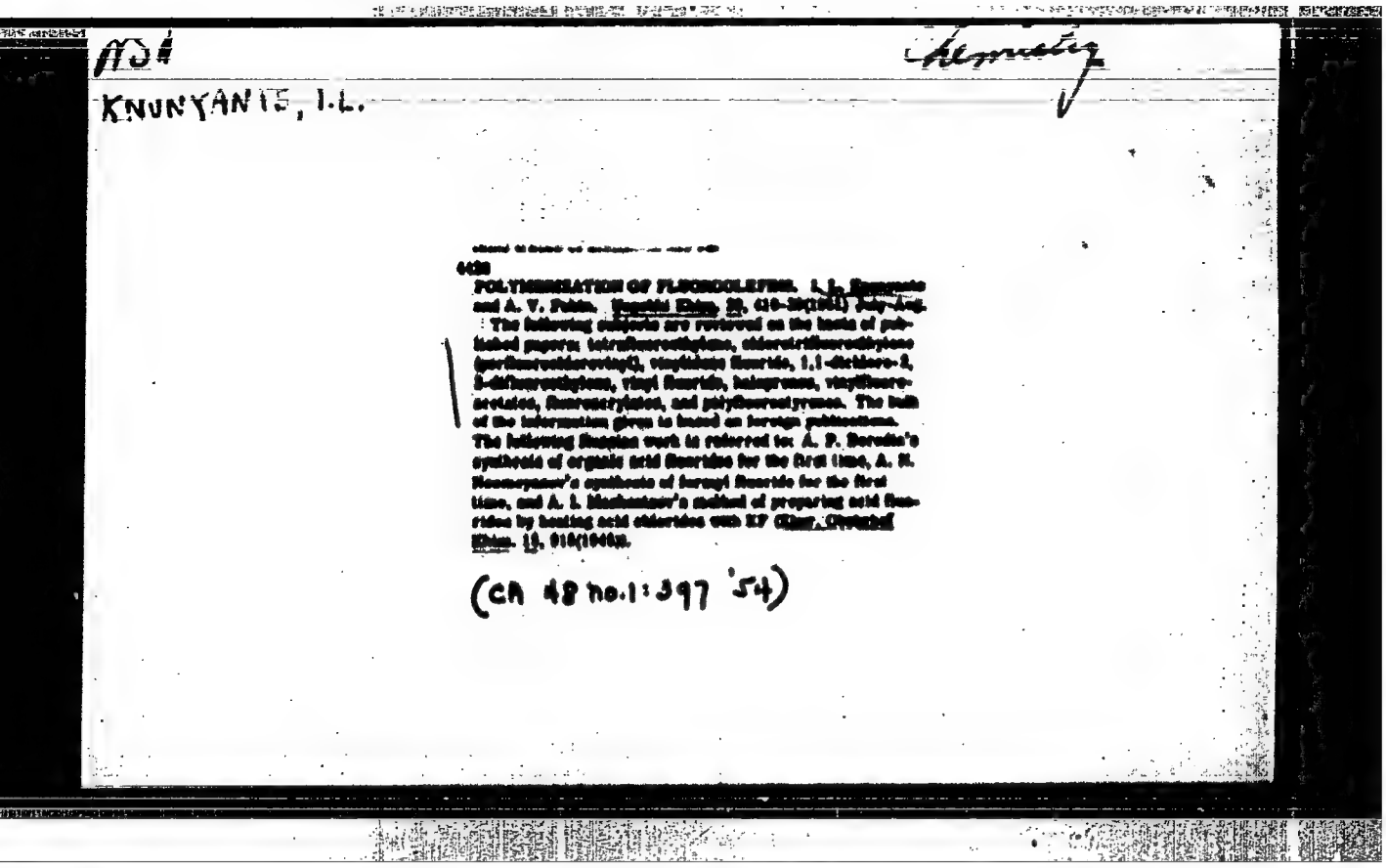
O. M. Kondapaff



KNUNYANTS, I. L.

"The Most Important Achievements of Modern Soviet Organic Synthesis," Khim. v Shkole, No.2, pp 3-15, 1951

Digest W-20576, 3 Dec 51



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Chemistry

KNUNYANTS, I.L.

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POLYFLUORINATION OF FLUOROOLEFINS. I. L. Knunyants and A. V. Fokin. Izvestiia Akad. Nauk SSSR, Otdelenie Khimicheskikh Nauk, 20, 419-30(1951) July-Aug.

The following subjects are reviewed on the basis of published papers: tetrafluoroethylene, chlorotrifluoroethylene (perfluorovinylchloride), vinylidene fluoride, 1,1-dichloro-2, 2-difluoroethylene, vinyl fluoride, halogenenes, vinylfluoroacetates, fluoroacrylates, and polyfluoroalkylenes. The bulk of the information given is based on foreign publications. The following Russian work is referred to: A. P. Borodin's synthesis of organic acid fluorides for the first time, A. M. Nesmeyanov's synthesis of benzyl fluoride for the first time, and A. I. Shchukarev's method of preparing acid fluorides by heating acid chlorides with KF (Zhur. Obshchei Khim. 13, 918(1943)).

(CA 48 no.1:397 '54)

KRUTYAKYS, I. L., FOKIN, A. V.

Olefins

Reactions of addition of perfluoroolefins. Izv. AN SSSR Otd. khim. nauk no. 2, 1952. p. 161-67

9. Monthly List of Russian Accessions, Library of Congress, August 1952, Uncl.

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Beckmann rearrangement. Rearrangement of α-ionone oxime. Doklady Akad. Nauk S.S.S.R. 85, 793-5 '52. (MIRA 5:8)
(CA 47 no.19:9945 '53)

KNUNYANTS, I.L., chlen-korrespondent.

Some theoretical problems of contemporary organic chemistry. Vest.AN SSSR 23 no.4:15-29 Ap '53. (MLRA 6:6)

(Chemistry, Organic)

1. Akademiya nauk SSSR.

KNUNYANTS I.L.

TERENIN, A.N., akademik; KONDRAT'YEV, V.N., akademik; KNUNYANTS, I.L., akademik; KABACHNIK, M.I.; SOKOLOV, N.D., doktor fiz.-mat. nauk; KNUTOV, O.A., doktor khimicheskikh nauk; MOSKVICHEVA, N.I., tekhnicheskiy redaktor

[Status of the theory of chemical structure in organic chemistry] Sostoianie teorii khimicheskogo stroeniia v organicheskoi khimii. Moskva, Izd-vo Akademii nauk SSSR, 1954. 122 p. [Microfilm] (MLRA 7:10)

1. Chlen-korrespondent AN SSSR (for Kabachnik) 2. Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk
(Chemical structure) (Chemistry, Organic)

KNUNYANTS, I.L., akademik.

Transformation of substances. Znan. sila no.1:10-11 Ja '54. (MLRA 6:12)

(Chemistry, Organic--Synthesis)

KNUNYANTS, I. L.

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Addition reactions of perhaloolefins. I. L. Knunyants and A. V. Fokin. Bull. Acad. Sci. U.S.S.R., Div. Chem. Sci. 1953, 971-80 (Engl. translation).—See C.A. 47, 9210.

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Vol. 48 No. 9
May 10, 1954
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SIMONS, Joseph, 1897- [redaktor]; KNUNYANTS, I.L., chlen-korrespondent [redaktor]; VARSHAVSKIY, Ya.M., kandidat khimicheskikh nauk [redaktor].

[Fluorine and its compounds] Ftor i ego soedineniia. Volume 1. Pereved s angliiskogo, pod red. I.L.Knuniantsa i IA.M.Varshavskogo. Moskva, Izd-vo inostrannoi lit-ry, 1953- . (MLRA 6:8)

1. Akademiya nauk SSSR (for Knunyants). (Fluorine)

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"Addition Reactions of Fluoroolefins. II. Addition of Alcohols and Thiols to Perfluoropropylene," by I. L. Knunyants, A. I. Shchekotikhin, A. V. Fokin, Iz. Ak. Nauk SSSR, OKhN, No 2, pp 282-289, Mar/Apr 53.

Describes the interaction of alcohols with perfluoropropylene, the saponification of beta-monohydroperfluoropropylalkyl ethers into alkyl esters of alpha-monohydroperfluoropropionic acid, and the addition of mercaptanes to perfluoropropylene.

256128

KNUNYANTS, I.L.

AID P - 1272

Subject : USSR/Chemistry

Card 1/1 Pub. 119 - 1/5

Authors : Knunyants, I. L. and Gambaryan, N. P. (Moscow)

Title : Reaction of hydromerization

Periodical : Usp. khim., 23, no. 7, 781-820, 1954

Abstract : A review of the hydromerization of unsaturated hydrocarbons, aldehydes and ketones, as well as of unsaturated acids is given. It is based principally on non-Russian sources. Four tables, 133 references (7 Russian: 1933-1953).

Institution : None

Submitted : No date

FRIDMAN, Rudol'f Arkad'yevich; MASLOVA, Ye.F., redaktor; [illegible], akademik, retsenzent; VOYTKEVICH, S.A., kandidat khimicheskikh nauk, retsenzent; LOSHAKOV, P.Ya., inzhener, redaktor, retsenzent; CHEBYSHEVA, Ye.A., tekhnicheskiy redaktor

[Perfumery] Parfiumeriia. Izd. 2-e, perer. i dop. Moskva, Pishchepromizdat, 1955. 526 p. (MLRA 9:4)
(Perfumery)

Knunyants, I. L.

2

Reactivity of perfluoroaliphatic [illegible] and some of their derivatives. I. L. Knunyants. *Izvestiya Akad. Nauk S.S.S.R., Otdel. Khim. Nauk* 1955, 719-21.—An examn. of existing information on reactions of perfluoro compds. (9 refs.) and the explanation of these reactions on the basis of electronic effects exerted of the highly electronag. F atoms is made.
O. M. Kosolapoff

KNUNYANES, I. L.

USSR/Chemistry - Conversions

Card 1/2 Pub. 40 - 8/27

Authors : Knunyants, I. L.; Lin'kova, M. G.; and Ignatenok, P. G.

Title : Conversions of mercaptoamino acids. Part 1. Isodimethylcysteine and its derivatives

Periodical : Izv. AN SSSR. Otd. khim. nauk 1, 54-61, Jan-Feb 1955

Abstract : Data are presented on the addition reaction of sulfur chlorides and alkylthiochlorides to dimethyl acrylic acid and its ester. In contrast to the addition reaction of sulfur chlorides to olefins, which results in the formation of symmetrical sulfides, the addition to dimethylacrylic acid and its esters is concluded by the formation of stable sulphene chlorides.

Institution : Acad. of Sc., USSR, The N. D. Zelinskiy Inst. of Org. Chem.

Submitted : April 9, 1954

Card 2/2 Pub. 40 - 6/27

Periodical : Izv. AN SSSR. Otd. khim. nauk 1, 54-61, Jan-Feb 1955

Abstract : It was found that the reaction between the addition products and ammonia results in the formation of alpha-mercapto-beta-aminoisovaleric acid which is an isomer of natural dimethycysteine and some of its derivatives. Two references: 1 German and 1 USA (1901 and 1946).